

TOWN OF NEWINGTON  
CONSERVATION COMMISSION

November 13, 2012  
Special Meeting

I. CALL TO ORDER

Chairman Block: It's now a couple of minutes after seven and I'm calling this Special Meeting of the Newington Conservation Commission to order. Please be seated.

II. ROLL CALL

In attendance:

Philip Block, Chairman  
John Igielski, Secretary  
Kathleen Clark, Member  
Jeffrey Zelek, Vice-Chairman  
Philip Shapiro, Member  
Andreas Sadik, Member  
Alan Paskewich-Alternate, sitting for one of the vacant Commissioners

Chairman Block: Our secretary Peter Arbur is here, but we also have Norine Addis as a special secretary for tonight as well, and Chris Greenlaw, Town Engineer is here as is Town Attorney Peter Boorman as well. So we are here for the public hearing on Application 2012-22. This is the continuation of the prior public hearing, and we've got a little bit of business before we start going forward.

The first thing is, for those of you who presented at the last session of the public hearing...

Chris Greenlaw: If I can Chairman Block, what I would like to do, although our regulations don't require it, given the magnitude of this application, we actually posted for the record in the paper the notice of public hearing and I would like to read that into the record. I don't believe we are going to be able to do this for all the meetings, depending if we have special meetings under short notice, but for this one we did. This was published on the first and the seventh of November the insertion dates for the Hartford Courant are proof. It's Notice of Public Hearing Town of Newington Conservation Commission Town Hall Conference Room L101 Lower Level Tuesday November 13, 2012. The Newington Conservation Commission will hold a public hearing to consider the following: Application 2012-22 for a proposed 48 lot open space residential subdivision development on Russell Road, north of Old Highway, Newington by Toll Brothers Inc., 53 Church Hill Road, Newtown, CT 06470. All materials and plans relevant to the above application are on file at the town engineering office in the foyer. Dated at Newington October 24, 2012 Phil Block Chairman, Newington Conservation Commission.

Chairman Block: Thank you. What I would like to do going forward because I want to make sure that our record is as complete and accurate as possible is, I'm going to reiterate some of the submissions from the prior public hearing. This is if you want to take notes for it.

- A. Gayle Reduka introduced an item called the Toll Brothers Clean Water Settlement article. We don't know if we got her copy, but we got one into the record.

- B. Gary Bolles introduced an Army Corps of Engineers letter dated 6/6/91. Again, we don't know if we received his copy but we have one.
- C. Mr. Richard Spring introduced the prior CERT report.
- D. Roy Zartarian introduced four items, the New York Times Article, the Department of Justice news release, an ETA news release and a Connecticut Botanical survey article
- E. The Town of Wethersfield introduced a letter for intervener status.

Now we have somebody else, we don't know who at this point also introduced an article about the truth about Toll Brothers. An unknown person introduced an article, Toll Brothers Skirted Environmental Rules, another unknown person introduced a press release from the Illinois Attorney General, another unknown produced an article from the city paper, and someone else mentioned Links to Toll Brothers articles. Now, if you are the person who introduced one of these things, please contact Chris later on and certify that you did so, so that we can attach your name to that part of the record.

Chris Greenlaw: Mr. Chairman, if you would, just reiterate what we would require, two things, we want to make sure that everyone signs in on the public sign-up sheet, so that we can correlate your testimony with the notes and in addition to that, anything that you drop at the office of engineering, please have your information.

Chairman Block: Again, if you are going to give testimony, please back up whatever reference you are making with a copy of the article or document, we need twelve copies, make sure that your name and address is on the document that you submit and indicate somehow how the document is supportive of your testimony.  
Just for discussion purposes, at this time, we are anticipating having the next special hearing on December, it will probably be on December 4<sup>th</sup>, and by the end of the meeting we will have acted on that probability.  
Also, for information's sake, I believe most of the Commissioners received in today's mail their packets containing the original ERT report. Dr. Abrahams original ecological report and assessment, Jody Chase's wetlands soil ecological report and requested copies of the reference copies that I just cited which are now incorporated into our record. Anything else under old business?

Chris Greenlaw: Yes Mr. Chair, perhaps a recap of the progress we made since our last meeting.

Chairman Block: Yes, please, a report to the Commission on the experts that we have gotten on board.

Chris Greenlaw: The Commission asked, through the Chair at the last meeting for the Town to solicit experts as far as write a scope of service contract. Toll Acquiesce came through with the money and we solidified agreements with Rema Ecological Services and that is George Logan, and we have a history with George both being on the other side of the fence and representing the old application for this mountain. You might remember the fact that when we did our map amendment for this site, George Logan worked on our behalf to verify that. In addition to that, there is Rick Hosley and Rick Hosley is a blasting and geology expert. All these individuals have reviewed the reference material and subsequently these professionals, the experts, have had the opportunity to go on site. We moved as fast as we could and we kind of backed into this date and they have some information they want to share with us tonight, and this will be something that will continue forth as we receive other information.

Additionally on October 21<sup>st</sup>, I submitted a formal application electronically and then formally the Monday thereafter to the state agency with CERT. CERT actually got back in touch with me just today, I think that they knew that we had a meeting tonight, and what I would like to share with you, maybe the Commissioners can speak more on this, I have copies for everybody. We asked that they get back to us in writing and what we have is a team assembled of five individuals with their respective disciplines which they are going to participate with the report. One thing that I want to point out as I indicated, working with the Chair, we had asked that time is of the essence and they are going to try to have their report come in, they are shooting for a target date of December 14<sup>th</sup>. so again, we will have enough time to schedule public hearings and have information available for all sides to review. So I'm going to pass out, this was received today from ERT and I'm going to pass this out to the Commissioners and one to either BL or Toll.

Chairman Block: Again, I am very much concerned about ERT having been a little bit slow on getting on board with this, and I'm hopeful that they are going to be able to get a meaningful report in to us in time for the applicant and the rest of us to consider it. With that, although we do have people with reports to give us, I would like to offer Toll Brothers an opportunity to state their, anything additional that they wish at this point.

### III. PUBLIC HEARING

#### A. Application 2012-22 Russell Road North of Old Highway

Tom Regan: Thank you Mr. Chair. For the record, I'm Tom Regan, I'm an attorney with the law firm of Brown, Rudnick, LLC, City Place One, Hartford, Connecticut. I'm here tonight representing the applicant, Toll Brothers. We have submitted some additional material which I believe you got today since the last hearing and I'm going to ask each of our three experts to briefly summarize the materials they submitted, either in response to questions that we received at the last hearing, or in response to Chris's comment letters. We also received a comment letter later from Mike Turner of Wethersfield which we will be addressing before the next meeting. We have met with Wethersfield since the last meeting but I'll let Attorney Branse describe that more when he speaks. I do have one issue with the CERT letter which I have just seen for the first time, and it's a grave concern in that statutorily we have seventy days to complete the hearing. So by my calculation, that gets us out to about December 25<sup>th</sup> which is a really bad date to end the hearing on but there is nothing we can do about that. If we receive CERT's report by the 14<sup>th</sup>, that's fine and I understand that and it gives us some time to respond. My only concern is that the last time we received CERT's report two days before the final hearing, and we responded and that caused us to make changes in our application which we had to make to respond to the CERT report and one of the comments I heard repeatedly from the public at the first hearing was, well, they changed their application at the last minute and we didn't have a chance to react. Well the reason we changed our application at the last minute was that we got the CERT report two days before the final hearing and we made changes to the application in response to the CERT report so, the timing is what it is, I only point this out so that people understand kind of, we can only respond to what we get to when we get it, and if we are pushed out to the end of the hearing, we'll respond, but it may be at the end and there is nothing we can do about that for the time frame.

Chairman Block: If I may interject for a moment, we have exactly the same concerns, we, I had that criticism conveyed to them, from the get-go. Chris, we have a different sort of time table in mind and that would be for our final date to be, what?

Chris Greenlaw: Why don't we do our final dates at the end of the hearing, and proceed accordingly. We are going to be looking for an extension.....

Tom Regan: We'll obviously consent to the full maximum period allowed on this by statute and certainly, if CERT does a revised report and we get it, that's fine, we'll respond, I just want people to understand that changes that we may make at the end are in response to the CERT report we just get, not because we are trying to use the system. We can only respond to information as we get it and I wanted to make that clear because I heard that comment repeatedly from the public at the last hearing and I wanted to just have everybody understand the time frames as they occurred the last time and why we responded when we responded.

Chairman Block: Fair enough.

Tom Regal: And with that, I'll turn it over to Mr. Gradwell to walk through a brief summary of the changes he has made to the plan in response to comments and questions.

Ray Gradwell: My name is Ray Gradwell, project manager, Licensed Engineer in the State of Connecticut and I would just like to briefly run over a summary of the changes that we have made to the plans in response to the Town of Newington's changes. I'll summarize those and I'll walk you through the plans as revised. The most significant change which you probably can barely see is the alignment of this intersection here which is Rockville Road, which is re-named. The alignment of that road was about 82 degrees or 83 degrees, the town's requirements were to make it 85 degrees or better. We realigned that intersection and reconfigured those two lots on the south side of that intersection to conform with the Town of Newington's Planning and Zoning Regulations. We also have made some minor revisions to the vertical geometry of the roads and the end of the cul-de-sacs, making sure that they conform to the Town of Newington's Zoning and Subdivision regulations. We've done that. All those plan revisions that we have made did not force us to increase any of the clearing limits on the site. The clearing limits remain the same around the edge of the wetlands, the clearing limits around the edge of the wetlands, they remain the same. One additional change that we made in response to the Town of Newington's Planning and Zoning approval was to minimize the clearing along this east edge, along Russell Road. We since revised the sewer location to do that. That sewer is located up a little bit further to the east. That allowed us to put some plants along the west and keep a stand of trees between Russell Road and the homes on this street as well as the homes on that street adjacent to the storm water management basin.

So in summary, just briefly, we have the opportunity to go through Mr. Greenlaw's comments, all of them which were great comments, revise the plans accordingly where applicable, with respect to the subdivision regulations, with respect to the zoning regulations, and edit the plans in respect to those things. One additional comment, a question from the Commission with respect to the amphibian crossing, there were some concerns about making sure that the grate on the end of the amphibian crossing, we provided that and that is detailed in the plans. I know that was a concern of you as a Commission member and you Mr. Chairman had a question regarding the type of material the amphibian crossing would be constructed of, we changed that material to a round duck type to a square structure just to meet your concerns and questions regarding that amphibian crossing. So in summary of the revised plans and application, once again zero wetlands and buffer impacts as proposed on this development, we're proposing approximately forty-four acres of open space on the west side of the site which includes Cedar Mountain. The plans were designed in accordance with the town regulations, the state regulations and guidelines and this minimizes the impacts to the site, with respect to the site planning. So, next I would like to bring up Russ Slayback from LEG.

Chris Greenlaw: Mr. Gradwell, what I would like to do, you supplied today in writing your responses, I'd like to hand those out to the Commissioners and I also want to reiterate to the Commissioners that you also supplied eight sets of the small scale plans, and I want to hand those out as well, so as they are listening they can page through the latest information.

Ray Gradwell: The letter is dated yesterday, November 12<sup>th</sup> and the plans I believe are dated today.

Commissioner Clark: Mr. Chairman, can we check to see if the public can hear what is going on?

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Attorney Boorman: We actually had a custodian come in and do a sound check from the back of the room and he said everything is fine.

Commissioner Clark: Good. Thank you.

Russ Slayback: Once again for the record, I'm Russ Slayback of Leggette, Brashears and Graham, hydrogeologists. I submitted a response letter dated November 8<sup>th</sup>, which I believe is in your package, just responding to some of the questions and one comment that was passed on from the public. Chairman Block, you raised the question about the calendar jointing in the basalt being a way for water to leave the wetlands and go down. I think that those joints are not really open conduits as you might envision. They are cooling cracks from when the very hot molten lava flowed out on the ground and then was exposed to the cool air and it cooled rapidly and you got expansion joints. They are a little more open at the surface and then are much tighter at depth. Further more, I got together with Dr. Abrahams and we agreed it would be helpful to do some soil borings in the wetland, especially in wetland three, but there was also one in wetland two. They found the upper layer of organic material underlaying by two feet thick, not thick, dense plastic clay, very much like the clay that you would mold in your hand. You will have pictures from Dr. Abrahams showing how it stuck to a shovel. With respect to the blasting, it was reported to me that the Commission wanted my bullet points on approaches to blasting that should be considered to be added to the specifications. I have concurred, I stated at that meeting, that I deferred to Doug Simmons of DRS Seismic Consultants relative to the applicability of (inaudible) stemming and other regards I have reviewed Sheet #GN1 of the BL Plan which is the blasting specifications and find they are consistent with all the other parts of my bullet points.

I was told there was a question from the audience about the rate of ground water flow from the berm or biofilter described by Dr. Abrahams. That would be ground water flow through poorly sorted ablation glacier till soils. The rate of flow is likely to be in the order of inches per day, certainly not more than a foot a day. That's all I have to add. Any questions?

Chairman Block: Yes, I do. The soil series type for that clay, has that been identified?

Russ Slayback: I'll leave that to Dr. Abrams to describe.

Chairman Block: All right. Thank you very much.

Dr. Abrams: Good evening, Dr. Ron Abrahams, Consulting Ecologist with Dru Associates, Inc. Glen Cove, New York. I am not going to read through my entire letter back on the comments that I heard at the last hearing, that I thought merited some response. I'll hit the high points, first of all being I am sure that the Commission is aware of this, but there's absolutely no Army Corps jurisdiction on these wetlands and there are two explanations for that. First, the Army Corps Wetland Program has absolutely no jurisdiction beyond their actual wetland line. And so, since this project is set back a hundred feet or more from any wetland there will be no Federal Wetland jurisdiction. The second explanation is quite

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simple, in 2006 the U.S. Supreme Court passed a ruling, the Reponis ruling, that eliminated their jurisdiction on all wetlands inland that do not have a demonstrable nexus or connection to navigable waters and it's our opinion that basins two and three on this site do not connect to navigable waters. There were questions raised about the suitability of the years during which these studies were done and while we were watching the site and working on it with respect to rainfall, so we provided the board with eleven years of rainfall data to the immediate vicinity and it shows that the years that we worked were just like that whole eleven year period, very typical, not unusual.

The question was raised about the rate of runoff, was rather vague and Russ and I discussed it and we are quite convinced that the pace of runoff from the developed area to the wetland is such that the hundred foot native soils through which this water will percolate will fully cleanse and protect the wetland water quality. What's more, the delivery of water back to the wetlands is in such a fashion that it will mimic the natural watershed so we see no adverse effect on the wetlands with respect to their hydrology budget.

The questions about the nature of the soils within the wetlands and my analogy to a gelatin was confirmed by our field work. And in answer to the question about categorizing the soils, we used the Munsell Soil Color Book and we took samples down as far as we could get, without a machine, and you have copies of these photos and what you can see are the layering of the soils and the evidence of the clay. Clearly you can see on the shovel on the lower part the yellow red clay silt smeared across the shovel and you can see the layers in the soil order in the top part of the photo. This is in our basin, the large wetland and it's in the southern section and here is a sample taken from basin two in the northern section. We walked right into the core of the wetlands and you can see the ground is relatively dry on the surface, of course it was damp and moist underneath, the soils are saturated, but again, the layering of the clay is clear cut. There is a two foot thick layering of clay. It doesn't matter what you do to the area near this wetland, you can shake it, stir it, rattle it, that clay is not going to let the wetland drain, except as would ordinarily happen which is very slow through clay, but primarily through evaporation or evapotranspiration through the plants. So we are confident that the work up on the upland, a hundred or a hundred and twenty five feet away will not alter the condition of the soils in this wetland.

Now the other topic that was discussed at length and upon which we performed extensive research and provided the board with references to the academic literature was about the herp tunnel. Now I want to point out, we do not expect there to be any adverse impact at all to the populations of frogs and salamanders on this property by the work around basin three, the small isolated wetland. We also took soil samples in that wetland and again, there is layering, not as thick as in the main wetland, but there is layering that protects this wetland from losing its water except through evaporation and because it has a very small watershed and slightly more permeable soils, this wetland drains naturally and very quickly and anybody who has been to the site and looked at different times of the year would recognize that this wetland does dry out. Some years it doesn't get very wet at all. One of the years that we observed it, it didn't get enough water or a long enough hydro period to support pond breeding animals, and that's why we think that, although we are willing to install the amphibian tunnel, the herp tunnel, we don't really expect many animals to use it. However, as I provided information in my response and you can certainly ask for more, the use of herp tunnels has been going on for over thirty years. First and foremost in Europe where the concept was fully vetted and tested. And then Americans began to pick up on it including people in Massachusetts, Connecticut, New York while I have worked with these myself extensively. Finally last year the Federal Highway Administration issued a manual, several hundred, maybe five hundred pages long that describes how to construct these things, demonstrates that they have been successful as does the academic literature, and we've included some of the specifications that are cited in that manual in my response to you, and the use of concrete box culverts with native soil bottoms is the most widely used practice, the one chosen for this project, and while there are many other types of designs we feel what we

have done here is more than adequate to protect the resource that we are interested in on this site. So that is what I have and, I will reinforce the comment we took the ERT report seriously when we got it, and we made changes on the basis on comments and recommendations, we didn't agree with everything in it, we agreed with quite a lot and some of the things that we did were in response to that, so we feel that if we get more usable recommendations from the ERT in time, we would be pleased to look at them. I think that is all I have.

Commissioner Clark: I wonder if you could speak to number 2, the tree loss, I know a number of members of the public were particularly concerned about that and could you speak to that.

Ron Abrams: Well, the comments are used the term (inaudible) remediation which is thoroughly inappropriate here, but transpiration is what happens when plants work with the water in the soils and either help to conserve or help to release water into the atmosphere. In the areas outside of the control area, outside of the adjacent areas of the wetlands, trees will be removed so there will be some alteration for the natural soil moisture dynamics and once the landscaping and plants that are used in the developed area are fully developed, that condition will return. I'm not sure if you have a more specific question.....

Commissioner Clark: I guess I just am picturing what Mr. Gradwell described as clear cutting on all of the properties, and it's up to the homeowners to replace trees as they see fit?

Ron Abrams: I think there is some landscaping as part of the infrastructure, but let Ray answer that.

Ray Gradwell: There is a planting plan as part of the application and as required by the Town of Newington subdivision regulations. We are providing plantings, the revised plans also provide additional plantings, if we go back a few slides here, the additional plantings we added on the east side of the property, as part of the requirements of the Town of Newington's subdivision approval located right here. There are street trees along each of the streets. There are plantings in the biofilters, in the back of the yards, and there are plantings along Russell Road, as well as plantings along this sediment and detention pond, plantings along this sediment and detention pond and plantings along that sediment and detention pond as well. So the site is, it will be heavily re-vegetated with those plantings.

Commissioner Clark: Plantings, you mean trees versus bushes?

Ray Gradwell: Trees, shrubs, there will be street trees along, you can see the little circles, there will be shrubs and trees at each detention basin and a line of trees along each, so it's a mix of trees and shrubs. You can take a look at this, the landscape plan, LL0, has the schedule of plants that we are proposing, and you can take a look at that when you get a chance.

Commissioner Clark: Thank you.

Chairman Block: Speaking to plantings and concerns of possible erosion, just to qualify the public as well, between the residential homes, is the topo going to be fairly level or is it going to be tiered?

Ray Gradwell: That's a great question. The topo will be tiered. As you can see, the road will climb up to an intersection, will climb up to a high point and then climb back down to the area of Old Highway. It will continue to climb up to another high point here, and then climb back

down to the end of the cul-de-sac so the topography will be sloping and the lots will be terraced, between each lot. If you look at 13 and 14, right here and here, you can see that gray area, that's the slopes stabilization measure that we are proposing, we're proposing an erosion control mat at each of the slopes between each of the yards, you know, 13, 14, 12, 13, 11, 12, so each of those will be a terrace between the lots.

Chairman Block: A swale type design?

Ray Gradwell: There will be a drainage swale, this street, Rockville Road is higher than this road to the east, so there will be a drainage swale behind to collect drainage and that will discharge off to the town drainage system in the lower road.

Chairman Block: Will there be any regards for plantings anywhere in those areas?

Ray Gradwell: The plantings within each lot will be homeowners specified and installed. The plantings along the street, once again will be per the Town of Newington's regulations. We're not proposing any yard plantings, those will be homeowner specified and installed. The only plantings that we are proposing for those yards will be grass plantings, seed mixes, for any of the yards, the ponds, the slopes.

Commissioner Clark: Do you, as part of your building process do you seed these lawns, or is that up to the homeowner when they get there?

Ray Gradwell: It's seeded by the contractor, the developer. They are delivering a finished product. It's not owner specified, one homeowner can't pick this grass, or that grass, it's built out by the developer.

Commissioner Sidal: I have a question along the western perimeter, what type of access are residents going to have to the wetlands? What is that perimeter going to look like?

Ray Gradwell: Along the perimeter there will be a biofilter, along this edge, that will be planted, it will be a small, little depression. If you look at the details, it's about a half a foot depression that will be planted with a biofilter type planting mix, and the biofilter will consist of rock filter, within it, so along that edge it's easily walk out type homes, you'll be able to walk out, the hundred foot buffer, ends right here so all of the improvements that we are proposing are up gradient of that buffer. So those walk outs, 29, 30 and 28 will have walk-outs to the rear of the wetland. We're also proposing placards along this edge and along that edge to identify the buffer so every seventy-five feet along this edge we'll have a placard saying wetland buffer, that is part of the revised plan also and in this location, right here between lot 46 and 48 we'll have a placard also identifying the limits of the wetland buffer, so the homeowner will know what's down gradient of their lot.

Commissioner Clark: I was just going to say, how does the public who don't own houses here access the wetlands.

Ray Gradwell: That's a good question. The public who don't own houses here, who use this property periodically right now, will have the opportunity to continue to use that. Once again, we're providing 44 plus acres on the west side of the site that remain open space. How to get to those 44 acres, it's really up to the public, but we are also providing them a parking lot on the south side. One of the conditions of approval received by the Planning and Zoning Commission to provide public parking. Our last set of plans had parking at each end of the cul-de-sacs. Planning and Zoning didn't like that. They wanted us to move those parking spaces. So we moved those parking spaces, to an area in Old Highway. They will be able to



enter that parking lot, we're proposing four parking spaces there, get out of the car and climb up the trail to the trail system that is in the lot and the trail system that runs to the ridge line. If you visit the site, you can tell, it will be a nice opportunity for the public to use that. When I usually go there, I usually park underneath the bridge and then walk up to the site, it's an easier access for me, but we're also providing trail access on Russell Road.

Commissioner Zelek: If you could just refresh my memory, what is the length of the herpetological tunnel?

Ray Gradwell: It's about 190 feet from point A to point B.

Commissioner Zelek: Okay, thanks. So at the last meeting, I had expressed concern or had a question what's the maximum distance the various amphibians are willing to travel? Is that information included in your response?

Ron Abrams: The last page of my response is an extract from the Federal Highway Administration guidebook on creating herp tunnels, they have an actual chapter on herp tunnels. You can see that they have given the range of specifications, recommendations for how to construct these, going from less than 65 feet to 165 to 200 feet. Obviously we are looking for a rectangular structure that comes close to their specifications for the longest tunnel.

Commissioner Paskewich: Just expanding a little bit back to the topo and the slopes between the properties, the homes themselves, the sheet flow coming from the roof, you're going to have gutters with leaders, are those going to be discharging right to the lawn?

Ray Gradwell: No. They will be hard piped into the drainage systems within the streets. Obviously the streets will have drainage systems so all of the roof leaders will be hard piped into those systems.

Commissioner Paskewich: Okay. Thank you.

Chairman Block: Any further questions from the Commissioners? Thank you very much.

Chris Greenlaw: Mr. Chair, I just wanted to add, the correspondence between the Department of Army, the Army Corps and the developer, I have a copy as you requested of the letter and I'd like to pass that out to the Commissioners.

Commissioner Igielski: Just for the record, I was sent an e-mail that Mr. Greenlaw had received from a participant at the last meeting, and within this e-mail he mentions the summary of his remarks in the minutes, he had a, he noted a few errors. I for one did not receive any written meeting minutes of the October 16, 2012 meeting, so I'm not sure what particular minutes he was talking about. Whether he reviewed the tape and is referencing that, his two comments are, first the word "not" was omitted in, he noted the report was stated that basin three did not underline support species continued, and number two, "forest ecosystem" should be forest ecosystem, so what I'd like to do is to pass this to the secretary for inclusion.

Chairman Block: Anything further from the Commission?

Commissioner Clark: I have a question about this document that Chris just handed us. Within it, it says that, "I am attaching a corps of engineer jurisdiction fact sheet for a summary of our authority, is that it on the back?"

Chris Greenlaw: And in addition, in your packets you should have received information as to the fact sheet, double check that please?

Commissioner Clark: It's here, it's on the back, thanks.

Chairman Block: At this point in time, if there are no further questions from the Commission, I'd like to ask Mr. Hosley, our last consultant, has any information that he can convey to us at this point.

Richard Hosley: Good evening, my name is Richard Hosley, I'm with Connecticut Explosives Company. I'm a blasting expert, contracted by the Town of Newington to review this application. I've discussed this application with the Town Engineer, and attended a site walk of the property, and reviewed much of the submissions, but I'm still making myself familiar with some of it, and there was a little confusion on my part relative to past accepted subjected information submitted information. I have had a change to review the hydrological report impact assessment from Russ Slayback and I say that I respect and agree with Mr. Slayback's comments, but had a few questions relative to detail and I apologize if this information has been addressed in the past or has not, but I do not have a copy of what was an excellent and thorough blasting protocol document submitted with the previous application. So I would like a copy of that from the Commission or from the applicants if I may, to review that.

Chairman Block: Excuse me Mr. Hosley, I'd like to ask the applicant whether or not that can be provided?

Ray Gradwell: Yeah, we'll provide it.

Chairman Block: Thank you.

Richard Hosley: Relative to those parameters, that I'm assuming are included in that blast plan, there's comments of rock breakage within certain distances. With a setback one hundred to one hundred and twenty five feet from the wetlands I'm not certain how critical it is, but I'd like to be aware of what the blast parameters are and comment to the results and no rock breakage more than ten feet away from an individual blast hole. It would be important just to clarify some of that.

Commissioner Igielski: Excuse me, could you repeat what it is you are looking for in respect to the distance that the blasting would have?

Richard Hosley: Sure. In the August 29<sup>th</sup>, 2012 report, Mr. Slayback on page 3, second to the last paragraph from the end, says, an excellent and thorough blasting protocol document was submitted as part of the previous application. I'm assuming that protocol identifies the blast hole diameter, the blast hole depth, the distance those blast holes are apart from one another, and some of the detail about the blast plan.

Commissioner Igielski: Okay, so you are making no professional judgment on, or expressing any professional opinion on that report because you haven't seen parts of it.

Richard Hosley: That's correct. I am some questions to summarize what I have reviewed and will make that complete at the end so that we can have an itemized list. Keep in mind that I'm still reviewing the documentation and still trying to clarify what parts of the previous application apply, or do not, just for my own perspective.

Again, in the November 8<sup>th</sup> reply, page one, last paragraph, I concur with Mr. Simms and I do as well, reviewing this information but would like a little more detail. Number one, no deformation of the trap rock will take place more than ten feet away from blast hole. We again want to know the parameters on that. Seismic wave clarity is, I think very clear in this report, Number three, again I'm in agreement with, but those details will be handy. I have some questions about the review of the Holyoke basalt relative to whether the Holyoke basalt acted as an aquifer, an aqualude....

Commissioner Igielski: Excuse me, can you define aqualude?

Richard Hosley: I can and I will but I don't think it is critical in this review because as Russell Slayback described the structure and the geology which exists as the Holyoke basalt is very tight in structure. In other words, there are no open seams or joints for the water to migrate or permeate this rock so aqualude would be described as a solid impermeable layer that does not allow the water to permeate. That solid layer might be considered a point of hydraulic conductivity, a way for the water to migrate over the rock mass. Again, I don't think this is critical because we are both in agreement with that, but I think if you look at the rock cut on Route 175 and the Berlin Turnpike, you can get a feel for the structure and how water migrates through or over this geologic unit and I think that might answer some of the questions that the Commission has raised and certainly the Town Engineer. So to summarize and not belabor the situation, and this information may be present and I'm not clear I'd like to be a little more familiar with what the construction sequence and the time frame is for the project, whether it's in phases or not, what the blasting sequence and time frame will be, and how that will migrate through the property to answer some of the questions of the staff and the Commission. I'd like to get a feel, I saw what looked like a cut and fill map in a brief slide show, but I wanted to get a better understanding of the yardage quantities of rock on site that might be available and whether or not that included the structures on site or maybe outside of the structures, for example, maybe the house foundations, the, possibly the areas between the house foundations and the walk-outs, certainly the utilities, the trenches, sanitary sewer, water footing drains, water, that sort of thing, and I'm assuming that the applicant has in the previous application, or where ever the reference was, has submitted a blast plan for the trench rock versus a blast plan for the mass rock, the open areas and then possibly, if identified a blast plan for rock excavation areas that include areas of sensitivity, for example, blasting adjacent to a commercial structure, or a residential home or a wetlands. I think those blast plans would probably fit all those criteria. The water courses and wetlands seem to be deemed a distance of 100 to 125 feet from the blasting areas, and I'd like to evaluate whether the blast plan based on the parameters are effective or not to meet the requirements and the questions of the Commission and the Staff. Obviously the blast plans should include but not be limited to delay time intervals, that's the timing between explosive charges, in a fashion that would reduce preconditioning of adjacent rock masses, in other words, not cause fracturing outside the blast zone. I'm confident that information is available and has been reviewed by the applicant's engineers and staff but I'm not aware of that. Also, maximum pounds for delay, pounds, explosive detonated, single time interval, maximum hole depth, hole diameters which essentially is charge diameters as well depending on which products are used and number of blast holes per time interval or time delay. There has been some discussion among the staff about a verification of the implementation of the blast design, there may be further discussion of that, something the applicant may want to consider or address at some point, but I feel that with the parameters of the blasting that would take place on this site, it would be practical for the site and efficient. I would also suggest as I mentioned earlier that rock cuts should be reviewed for prominent geological structure, open void seams, that sort of thing as we migrate into the job site and at various

areas to address any changes that might take place as we approach critical and sensitive blasting areas.

With that, I'd like to see or ask if there are any questions among you folks here and maybe I can address those.

Commissioner Clark: I guess my question is can you layout what your plan is now as you don't have all the information you need to give us the information we're seeking, so you will then review information that you don't have at your disposal yet and then come back and talk to us again.

Richard Hosley: That's correct unless the Town hasn't provided me that, or the Commission hasn't, I'm not familiar with, you know there has been a reference that a blast plan has been submitted, I'm not sure if it applies to this application or not. Bottom line is, I would like to see that to answer any further questions that the staff has, or the Commission.

Commissioner Clark: And I have just a general question, I put this question to the other blast experts, but I think it could just as well go to you and that is that the person developing the plan is not the person who is implementing it. That person has not been hired yet because the development has not been approved so in your experience, do most of the companies that would be hired to implement these plans, are they equal as far as performing these tasks in the manner that the design required?

Richard Hosley: That's an opinionated question, but I ultimately have to say, that the blasting contractors in the State of Connecticut and the local blasting contractors that I am familiar with in this area, and certainly some beyond, are, have very stringent Federal, State and local requirements, to use explosives in blast and are typically regulated not only by the government itself, but by their insurance company to have proper training, to conduct themselves in a business manner that meets a code of ethics that we call, that is established by the International Society of Explosive Engineers and many of and most of the contractors that I am familiar with are associated with this code of ethics and those procedures, otherwise they can't exist in business. It just doesn't, it's a very supervised, regulated, overseen operation that has no, very little room for error.

Commissioner Clark: Thank you.

Richard Hosley: I might want to add there are some challenges on the site in terms of installing or blasting for the installation of the sanitary sewer in Russell Road and although it is a distance from the wetland I think that it is probably going to be the most tenacious aspect of the blasting that is conducted.

Chris Greenlaw: There is a lot of information as it pertains to blasting that probably, once the Commissioners read the testimony of the hearing, they are going to develop questions, but, can you go back and discuss from the beginning, you are requesting information on an excellent thorough blasting report, you as yourself can only speculate how this site would be developed in blasting, but can you discuss those things that you are looking for. What are the different types of blasting, you asked for three things for instance, the utility type blasting for trenches, the mass blasting for the site and then blasting as it relates to the wetlands. Of course all of them are a concern to the wetlands but can you discuss some of those properties, things you would be looking for, why they would be different in your opinion and why you want that information for the Commissioners?

Richard Hosley: Well, in terms of the specific areas or zones, trench rock, mass rock or areas of sensitivity, there is a requirement of different blast design. For example, in the

sanitary sewer in Russell Road the focus would be to blast a relatively narrow trench to the depth of the sanitary sewer and a few feet below for the installation of the pipe. It would not be cost effective for the applicant or the blasting contractor to blast much wider than is necessary to install the pipe and the bedding around that. That blast design requires the placement of small diameter charges relatively close to each other so that rock isn't affected outside of the trench. This allows for a stable trench for workers to work in to install the pipe. It is a savings of money, in other words, the blasting contractor has no reason or interest to blast outside of what minimum area they need in order to install that pipe. So that design would be different in the sense that it is narrower and deep relative to an open area of cut which would include possibly the road and the house foundations and the house lots where there is a cut. So that design would be the placement of charges further apart, with less pounds of explosives or less energy utilized than there would in a deep, narrow trench for a pipe installation and then further more, in a sensitive area, blasting adjacent to a residential commercial structure, or in this case, wetlands, you would have a blast design that utilizes less energy and more relief so that the energy in the explosive charges would not be wasted in the form of air over pressure sound or ground vibration which could damage the rock adjacent to the blast holes. If that answers your question. We can be more specific about that I think once we review the design.

Chris Greenlaw: Right and I think that's what the Commission is looking for, because the middle pocket wetland there, as you see, there is a storm water management area, and the relief on the decibels that we have are like two and a half feet. Additionally what we are looking at from the existing topography is about an eight foot cut, six feet of blasting, and I guess that is what you are looking for, for the Commission is that when you are blasting in that close proximity to the wetlands without the plan, Mr. Hosley wants the plan to see the type of blasting they are going to do, the spacing, the amount of explosive they are going to put in there, to substantiate how far out that fracturing would go, because that's exactly what you are looking for.

Richard Hosley: My understanding is that the applicant has the plans, it's been reviewed, it just needs to be attached to this current application.

Chairman Block: Mr. Hosley, I just want to make sure we have the record clear. You mentioned a blasting protocol and you mentioned a blasting plan. Can you, are those two different documents or one, and the difference between the plans for the trench, the mass and the sensitive areas, are those separate plans or chapters of the same plan?

Richard Hosley: Essentially chapters of the same plan, with some parameter changes. In other words, ultimately drilling and blasting is similar but the parameters, the size of the charges, the spacing of those charges, the depth of those charges, the ratio of the depth to the placement, the type of explosives they use, that would vary. So it's all very similar, but addressed to the work at hand. In terms of plan or protocol, I think if you wanted to define the terms you would find that there are some difference, but essentially in my explanation I mean the same.

Chairman Pruet: So you would conveyed enough information to the applicant to know what to give, to submit to your review?

Richard Hosley: I think I have. Unless they have questions.

Commissioner Zelek: You mentioned, I think you used the word tenacious in terms of concerns about blasting on Russell Road. Are there certain challenges there, or risks that we need to be aware of?

Richard Hosley: I just said it was the most tenacious of the site, and that is relative to the cut of the sanitary sewer in the road, the fact that the road is paved, the fact that it is adjacent to telephone lines, the fact that there is a commercial structure here. From a blasting perspective when I look at this, I say the challenge is going to be here for the blasting contractor, relative to the entire site.

Commissioner Paskewich: I don't know if you have an answer to this, or who we should speak to, but does this site possibly or is there information that could lead to surveying and knowing somewhere in the record that there may be aquifer underneath it?

Richard Hosley: I made a statement about that early on, in my presentation here. I don't, I have an opinion to that, to verify that opinion beyond observation on the property and observations on rock cuts, adjacent to the property and rock cuts in Holyoke basalt throughout the State of Connecticut from New Haven to North Hampton, Massachusetts, I feel comfortable. But geology is site specific, and geologic structure which I think is the focus here. Structure is cracks, joints, faults, that sort of thing is site specific and without, I don't think it's necessary or critical to investigate at this point.

Commissioner Paskewich: Do we know of any mapping that has been done in survey the depth of this rock in that area? Maximum possible depths?

Richard Hosley: That's a good question. I've had a chance to review a test boring sheet that I believe indicates fourteen testing borings but only twelve in the development area if I'm not mistaken. That is a bit of information to help identify what is there, how much till, and top soil and loam as described by the experts is on site.

Commissioner Paskewich: Site specific.

Richard Hosley: Right, for that location.

Commissioner Paskewich: Thank you.

Chairman Block: Then as regard to the actual question that was asked, the actual basalt goes down hundreds if not thousands of feet.

Richard Hosley: I believe that has been investigated and I shouldn't say for sure, but my memory serves me, several hundred feet, five, six hundred, eight hundred feet. The Holyoke basalt is a fill, a lava flow, I'm sure it varies in location. From my perspective appears to be very homogeneous, from what I have observed and read and because of that, there can be some debate about whether it is that non permeable rock mass that the water flows over or if there are thrust faults and open geologic structure which I have not observed, it appears to the closed geologic structure that could possibly have water migrate through it. I tend to believe that there are few horizontal structures present in rock cuts that are available to review that.

Chairman Block: This really is a background question that is really going to require somebody else to give us the final answer on, but in looking at the topography of the site as it exists and the topography as proposed particularly along Rockville Road adjacent to the wetlands, one of the answers given before was that it was going to be terraced a bit, and certainly the plans show walk-out basements. There has been a slide presented which had a color coding as to the extent of the rock removal with the density. Given that background information, is it likely or not that this shattering of the rock for the mass removal and these

other blasting is going to alter the subterranean topography so as to alter the drainage and the water flow to the wetlands?

Richard Hosley: I have not observed the cut and fill diagram that was in the slide other than what was briefly shown tonight. I have not received or scrutinized the cut and fill areas where there is rock and that coordinate with the test holes. It would appear obvious to me that where blasting is going to take place in this basalt, to whatever depth you are blasting basalt, that is going to be, regardless of the finished grade, that is going to be a depth of increased permeability. In other words what was solid rock is now broken rock. Maybe it is in place, or maybe it's removed but the bottom of the blast holes essentially represents in my mind, unless there is information that I haven't reviewed, in the blast areas and location of permeability. In other words, it's going to change that elevation of permeability. That's not as much by blasting, as the design to put it there. I don't believe, based on my knowledge of accepted blast design that it's going to cause damage below the bottom of the blast holes and in fact, tends to blast upward to the point of relief. What I would like to explain to the Commission is that the utilization of explosives is a confined rapid expansion of gases in a rock mass, and that rapid expansion of gases will break rock toward a point of relief and the point of relief in the case of blasting downward is upward or forward depending on the blast design and how it's excavated and the sequence of the construction, the sequence of the blast.

Chairman Block: But again, given the dimensions of the lot, the distances between houses and again I'm referring to that color coded slide that was put up, this blasting is going to be continuous along the contra lines, isn't it? They're not going to be doing a foundation hole here, a foundation hole there, it's going to be the whole length of the block, if you will.

Richard Hosley: I think what you are asking and I just want to clarify this, is the blasting and I think it's relative to the cuts and fills, and how much of this has to be brought down to grade or subgrade, is the applicant going to blast the entire area, or are they going to isolate the house foundations and the utilities. I think that's a question for the applicant really but you know, reviewing the test holes and the topos we could probably come up with some sort of plan. In other words, the house foundations will probably be blasted four to five feet outside of the existing house in order to install forms for the concrete and room for structures like footing drains and that sort of thing.

Chairman Block: Will the blasting protocol plan that you have asked for explain that in better detail.

Richard Hosley: No, that would have to be a specific question to the applicant.

Chairman Block: Then can the applicant give us an answer at the next session? Thank you. Anybody else have questions?

Commissioner Igielski: Am I correct in concluding that your basic presentation this evening was to outline the information that you need from the applicant regarding this application as far as the blasting goes, so that you can then comment on that information and answer our questions?

Richard Hosley: Yes.

Commissioner Igielski: Now, will your report also include your professional recommendations with respect to any changes or different ways of doing things that you might have versus

what you might see, especially in those areas that are closest to the buffer area, the hundred foot buffer area which is then closest to the wetlands?

Richard Hosley: If that is requested of me, I will.

Commissioner Igielski: Mr. Chairman, I'd like to ask that the Commission consider that request as being part of the report that he works on and prepares.

Chairman Block: Any opposition from the Commission? Please consider it as such, and for the applicant as well.

Commissioner Igielski: Now it will be a matter of our professional blasting consultant comes up with a recommendation with respect to blasting in a certain area, that is contradictory to the applicants professional blasting, then we as a Commission would have to make a decision as to which way we would want the map to go so as to have the least or no impact on the wetlands.

Chairman Block: Correct.

Commissioner Igielski: Thank you.

Chairman Block: Anybody else? Thank you very much. We also have a preliminary report from Mr. Logan, our environmentalist.

George Logan: Good evening, my name is George Logan and I'm the owner of (Inaudible) Ecological Services. Also, my associate, Segrun Gadwa, my associate is here with me tonight. We've been collaborating on the review of this project. She will be coming up in a little bit to ask some of her questions of the applicant. We have been quite recently been retained to provide this third part review of the application and we have been quite busy in going through all of the information that's been made available to us. We were able to visit the site a week ago today, well actually yesterday. We spent a few hours there, saw as much as we could see with just one session, subsequently to that we, one of our associates from the firm was able to quickly go onto the site after a rainstorm and collect some samples, both from what I guess we are calling Wetland One, just near the property boundary and also within the flooded portion of Wetland Two, the vernal pool, the vernal pool portion. Just so that everyone understands, we are not ready at this point to make any conclusions or recommendations. Our, what we have been doing so far is doing some fact finding, review of the information, of the information that is available to us, and I'm happy to hear that tonight some additional information has been put forth by the applicant which we will happily look through and probably makes my job a little easier for some of the questions that I was going to ask, so what I have done, today as of today, myself and Segrun, have put a number of questions together and these are basically for the applicant to provide me some additional analysis and additional data that we think might be pertinent, that they can provide, and between now and the next session, we will discuss how if receiving that information, that additional analysis, those answers and then being able to put forth and make some of our final testimony and some of our recommendations. So what I have done today, I have focused primarily on some of the major issues that I think everyone is very interested in, in several categories and we have not gone into, for instance I'm not going to talk about erosion sedimentation control, although I would like to, as a soil scientist to do that, that is probably something that is easier to take care of by basically doing certain things, amending the plans as far as strategies for the erosion control. What I would like to do is focus on the vernal pool characteristics of the site of the two wetlands that we are talking about, Wetland Two and Wetland Three. Some very general questions on wetlands in general and then some



questions regarding storm water management with more specifically looking at water quality and the maintenance of water quality within the regulated systems. These questions that I have are in no particular order. They are just a stream of thought as I was reviewing things, so if I seem to be going off this way and coming back that way, please forgive me, so if it sounds a little disjointed, it is.

There is a question for Mr. Abrams, and by the way, I want to say I basically long handedly scratched these questions, we would be more than happy to put these questions in writing on the next two or three days and through the Commission and through Mr. Greenlaw, pass them over to the applicant. So that he has something in writing from us, instead of something like this.

Regarding vernal pools, I guess one of the first questions that I had as I have been looking at the potential connection of these two vernal pools, three and two. Is if Mr. Abrams thought that from a population perspective that the overall survivorship of the herpetofauna on the site, it is important to keep this kind of connectivity between these two wetlands. Since 2011 and it being sort of a, I know that the testimony was that in 2011 the vernal pool inventory season was sort of normal. It really wasn't, necessarily. It had some interesting things that happened as far as hydrology early in that year but I know that from our perspective as we look at vernal pool habitat, and this is something, we have been doing vernal pool habitats now for many years, I think we're up to close to 135 vernal pool studies, in the past few years. Typically, we like to see more than one year of data, only because things happen. There is enough of a variability from year to year so that if you see more than a year, you are able to draw some better conclusions as to what is going on out in the systems. For instance I know that just recently the Corps of Engineers, they put out some guidelines as far as inventories around vernal pools and they recommend a minimum of three to five years data. I'm not saying that we need three to five year data, but it was, it was curious to me that, and maybe the data exists and I haven't seen it, that we had a hiatus between the past application and this application and the opportunity would have seem to have been there to go out and at least do an egg mass counting or observations in these two pools on the site. We noted from the herpetofauna report that there was an emphasis, an obvious emphasis on the (inaudible) ground pool species. The question is were there any other targeted surveys also conducted on other herpetofauna such as spotted turtle and four toed salamanders. I noted from some of the data that I have that we have spotted turtles recorded both in Newington and in Wethersfield nearby. Regarding the proposed amphibian tunnels we heard that there is some additional information and this question really pertains to that, I would like to see what the applicant feels is the (inaudible) of these tunnels in producing the desired result which is to the connectivity of these two vernal pool systems and we certainly will take a look at that data and get back to the Commission. One of the things that we typically do when we do our vernal pool investigation is that we record the depths of water, of ponded water at each of the egg masses recorded and whether they were attached or floating. I could explain why that is important but I don't want to take too much time at this point. Also, other observations that might be important if we note that there were more opaque egg masses versus clear egg masses, there's some reasons why that question goes forth and it has to do with genetic (inaudible). Another thing that we typically do and we didn't see it in the report but that data might exist. I know when I do my vernal pool investigations I take a lot of information that that is not always in the report, but it would be important to characterize the sub straight within these vernal pool areas, particularly vernal pool two. I know what I heard today is that some of the data has become available and I would be more than happy to see some slides, and the interesting part of it is, what I saw today confirms in my mind is that there is variability out there because when I went out to the middle of the scrub swamp which is also a (inaudible) habitat I sunk my auger into organics and my auger is what, three and a half feet deep and some of what we saw today, that they said the organic

sub straight was only a few inches deep, so it depends on where you do these things, so if you did it in one spot here, it might be very different from another spot, so, my recommendation is that we need to get a realistic profile of what is actually going on out there as far as the substrate is concerned, that would be organics, and just one boring is probably not going to be good enough. We need to understand the geohydrology of this system, what is happening, because that is going to give us an idea of potential impacts.

One of the things that might be available and I apologize again if I didn't find this, particularly what we like to see is a graphic of some sort that shows where the edge of the breeding portion of the habitat is, that means the flooded area. What we see in here is the edge of the shrubs, the tree shrubs, so we have more of an open area here, but I know that the waters were expanded from that, so it would be nice to have a graphic that shows what the whole limit of the breeding habitat within this wetland is, and really, it's an embedded habitat within a larger wetland. With a graphic it would be good to know, where the minnow trapping took place. By the way, I'd like some dates as far as when it happened in general, I always like to know the dates that my fellow consultants go out and do certain work. It enhances the picture of what is going on out there, with a sequence. So I would like to be able to see in the graphic where the distribution of the egg masses are also. Were there more on one side and less on the other, where were the frogs versus the spotted salamanders, were the spotted salamanders equally spaced all over the place. Now in an attempt to understand the hydrologic regime, particularly in vernal pool two, I think vernal pool three is a little easier to figure out, did the applicant consider doing something that we've done in the past in these kind of systems, and that is to install pizameters along, one from the middle of the system going in an easterly direction, with the last pizameter of three at the edge, close to the edge of the wetland, and one is in the middle and one is an intermediate condition, and they are both shallow and deep and then do one.....

Commissioner Clark: What was that word?

George Logan: Pizameters.

Chairman Block: Please explain.

George Logan: These are, what they are is small in diameter monitoring wells that we are able to put and monitor ground water levels and a shallow one might be in what we think are materials that are nested on top of other materials so the organics and the substraights, and the deeper one would be a lot deeper, as far as it could possibly go and what that would help us to do, is to figure out if we truly have a perched water table here, or not or if there is sort of an intermediate situation. It was interesting to me that when I read Jodi Chase's report, she called this wetland number two, under an geologic classification a ground water depression but from the rest of the information that we are seeing it would seem, Mr. Abrams or others seem to think it is more of a surface water depression. So, having these kind of pizameters and monitoring them, maybe through a couple of good size storms would have been helpful. Talked about the dates, another thing that would have been important to me, if that information exists is whether the Dru Associate staff when they were out there sampling, the various dates that they were sampling, whether they did some kind of water quality sample. We typically do that, we have meters that we carry around with us all the time, sometimes we get (inaudible) samples also. This is a different type of wetland because of the geology and the soils here. It would be nice to know parameters like temperature, dissolved oxygen, ph..

Chairman Block: How much time do we need, or do you need to have those monitoring wells stay in place to get accurate information?

George Logan: That's a good question. One could be lucky and have them installed and then have a large storm come up, and be able to see how the water levels on the pizometers react in relation to the storm water and run off event, but that cannot be guaranteed. You might have a little sprinkle and nothing happens so you need to be able, in my experience to be able to see a significant rain event happen, and then we able to interpret the data, depending on how they respond.

Chairman Block: Excuse me, I noticed that you said the word, rain event. Now that we're heading into colder weather, a snow storm then would seemingly then not help your determination.

George Logan: Right, but again, I cannot stop asking these questions because I think they are important and maybe there are some answers here to be had. Maybe I can't possibly get everything that I desire in order to do a through evaluation but obviously the more information that you can get, the better.

Commissioner Clark: I have a question. You questioned some of the thoroughness of the previous reporting, my questions is if a report on the wetlands from Dru Associates was not complete, say it was more of a qualitative report, not a quantity report, that lacks the dates and measurements that such a report would normally contain, would it not be possible to, say re-create a report at this point in time.

George Logan: It might not be possible. It puts me in a hard position, because obviously I've been on their side many times myself, and sometimes we can't, as consultants we can't chose when we do certain things, sometimes we're not released to do certain things, and then we are in a situation where we're, we would like to have more data to give, and we can't. But what I fall back to, this was a good case, and I'm not blaming anyone, this is just the way things are falling, is that there was a significant period of time this past growing season when the applicant was considering putting this application forward after last year's application, where this additional data could have come forth and I can't speak for anyone else, I can only speak for myself, putting myself in their shoes, I would have been adamant about getting additional information in order to be able to plug in any of the data gaps that exist in my opinion. I see some data gaps here now. I fully expect that some of this data is available and will be forthcoming, some of it maybe not, maybe they will get lucky and be able to address some of these things, but at the end of the day, it's not my responsibility, it's the applicants responsibility and burden of proof to put forth the information for someone like myself to analyze and come to a definitive conclusion.

Commissioner Paskewich: Are there any other means of determining this perched water table, I'm just talking out loud now, possibly around the perimeter of the vernal pool, not disturbing it.

George Logan: Putting in pizameters really is done by hand and so it really doesn't cause a lot of disturbance. You basically carry the pizameter on your shoulder into the wetlands with waders if you have to, and stick it in and take a big hammer and pound it in.

Commissioner Paskewich: What I'm leading to is, if you did a boring outside of the vernal pool, near it, by the soils that you see in that immediate area.

George Logan: It's possible, but again, if you, there are other means by which they can give us information and I'm sure Mr. Slayback is thinking right now and saying, ah ha, I know what to do. What we are trying to figure out, is to be able to do a cross section through this wetland in a couple different directions, and see what is under it. See how thick these

sediments are, what kind of, the clay is possibly a good thing as far as, again the variability kind of concerns me a bit, so that would help me to see to what extent the ground water component is what this wetland versus what's been said all this time which is more of a surface precipitation, and the ground water component that actually feeds this wetland long term.

Commissioner Paskewich: I see your answer, what not, I wasn't thinking about that and now you've given me the answer of the purpose of the monitoring wells in the vernal pool. Thank you.

George Logan: And they can provide qualitative information that is robust enough for us to begin without having a tremendous amount of (inaudible) data. Now, if they get lucky, and they want to go and do this, and have a significant rainstorm between now and the end of this, it might be helpful, but I'm sure they will come up with some answers, the more data the better.

Going on and related to this is something that they should look at. As I look through, again, my reviewing is preliminary at this point, the devil's in the details as they say, so I'm kind of backing up into the details, I'm hearing some more information here today which is good, but as I'm looking at this development, I realize that one of the most important components is to ensure that when we are done, at the end of the day, that the hydrology of these two wetlands remains at a similar level. That any differences are not any more different than what the weather would throw at us. In order to do that, and because there are a lot of changes that happen, as you look at the various watersheds, some watersheds are taken away, some are put back in, they are trying to do a balancing job in order so that at the end of the day there is not any less water but I would say that any more water is also important. More water is not necessarily a good thing, what we want to do is have similar levels there fore I would ask that the applicant consider doing an hydrologic budget for these two vernal pool systems to see if there are any significant quantifiable changes.

Last question from me, and there are a few from Segrun on the vernal pool issues is how we will ensure and I looked at the storm water basins nearby and I'm probably talking more about this one here, just to the north which is I think is number three. (Inaudible), they might be something that they are doing that I haven't seen on the plan yet, I'd be more than happy to see what that is, but the fear here is that as amphibians disperse or migrate to other areas, the beginning of the spring when they are looking for their natal pools, that they come across a decoy pools that are the forebays for these that are slightly depressed and filled with water and then they become ecological sinks of restoring the productivity of those individuals that happen to lay their eggs there.

Commissioner Paskewich: Explain a little bit more. Am I correct in what you are saying then if those areas are not designed properly, they will lure the wildlife to nest there in a situation where it is not viable for the young to grow.

George Logan: Correct.

Commissioner Paskewich: So they will be wasting.....

George Logan: Yes, and believe me, I've seen many detention basins that have egg masses from species, but what happens, particularly when you are in a situation with the forebay, they find a few inches of water and say, Ha! Good habitat. I don't know that they exactly say Ha! But they lay their egg masses and they take off and they said everything is good and then the next storm comes around and washes those egg masses to a dry spot and then we lose the productivity from that particular line. Continuing on, on the wetlands, mostly relating

to Ms. Chase's report, and we're continuing to digest that information, but again, this is a question that has plagued me a little bit, and I hate to ask it, but I must. The diversity of vegetation in and around the various wetlands is quite important and we're trying to assess the function and value of each of these wetlands for long term productivity. We noted that Ms. Chase's report was the bulk of what she did in the field was done in the fall and in the winter. It was during a non-growing season at the time. Well, since that time, and since the last application went in again, we had almost a whole growing season where additional information could have gone out and been inventoried, so when she says in her report, because of the season, she didn't have the ability to inventory anything but the tree species and the shrub species to the extent they were viable during the fall, and she couldn't do much with the herbaceous species. That's very important, herbaceous species in these kinds of wetlands are very important in telling us how valuable they are, how productive they are, and again, that's been a question that has sort of plagued me.

Moving on to the storm water management, again the angle that we look at here because I'm not an engineer obviously, but we look at it from the ecological professional soil scientist perspective and the concern is, of course, that we don't change the water quality, or we retain the water quality of these systems, and in this particular case, probably wetland two, because of the fact that it is a more valuable productive wetland than wetland three, but wetland three might actually might be more sensitive because it's smaller and has a smaller water shed. The idea is if we change the water quality we change the physical characteristic of the wetland. That is a definitive impact category, so the questions that I have here regarding storm water management again, as opposed to water quality, is number one, could the applicant, and this is one of those general questions, where we have to start somewhere, and I know and I've been in this situation, many times, we go out we try to look at our sites specifically as a designed and pick what we think, from talking to other consultants, is the best management practices for this particular site, so it has to be site specific. I'm sure that has been done, but I have to ask in order to have a starting point for my review, How, to show how specifically the proposed storm water management practices comply with the intent and the guidelines of the Connecticut DEP storm water quality management. It's sort of a bible for this kind of area. There's a great amount of information in that manual and it's very important for them to be able to say, come to me and say, well, this basin is this kind of above ground primary treatment system, and then I can go in and look and see how they are complying with the guidelines and suggestions, if you will, that the DEP has, which are very important to us. Number two, I'm sure that there is somewhere, I apologize if I haven't seen them, I've seen evidence of some of it in the plans, I would like to see the actual calculations for the water level volumes for these areas as per the 2004 (inaudible) manual. I notice for instance that there are some notations on, for instance this one says, sediment number two, volume required ten percent water quality volume so they must have figured that one out, but I'd like to see their calculations. Nineteen cubic yards divided by twenty-two cubic yards but that is only a part of the whole story. And by the way, if this is to be a detention basin, the water quality volume needed for the (inaudible) might be larger, so if they can tell me what they think this matches in the manual then I will be able to look at it a little more critically. The applicant states that the proposed hydrodynamic separators and this might be a little picky, I apologize, but this may be a pet peeve that I have, that these dynamic separators are rated at eighty percent for removing suspended solids. My question is do they provide research to back up that particular statement. I still have to find good information, maybe it's out there, that these hydrodynamic separators are actually able to do eighty percent removal of those suspended solids, I know what the DOT says, but that's the DOT.

Now again, to water quality and the extreme importance of when you have isolated wetlands that are not thru-flow wetlands per se. So they are isolated in the environment, they have relatively small watersheds so dilution in many cases is none existent, so what I would recommend to the applicant, which will give us a good understanding of what's going on with these best natural practices is to provide a specific (inaudible) loading analysis, showing

loads that are generating here in the development area, and permeated by the proposed expansion practices and the sediment will show nutrients, CoD, and the like. If they want they can use the simple method by sure, that would be fine.

I know that I hear and I understand, I have seen some of the data, fourteen test pits have been done around the site, and that was done for a number of reasons I'm sure. I see what the over burden was, where blasting starts, the quality of the rock, etc., water, the problem is that we don't necessarily have those test pits in the right places as far as the storm water management is concerned. One, two three, four, and one up there. Now I fully understand that the answer to that may be well, we're blasting, we're going right into the blasted rock and that might be the case, but I think it might be a good thing to have data for each of these areas to see what is going on, unless they can guarantee that this is exactly where it's going by looking at the ground. I know there is a test pit up here, but it doesn't tell me what's happening within these spaces and the DEP always recommends a couple per basin. Another question that I had has to do with this level spreader, and I looked at the detail, it's about 260 feet long, and the idea is good, trying to spread out the water that is going to be coming out, I know it's a rock filled trench, and that is good. The issue here is that if it's not level it will tend to break out in places where you have direct discharge and you will have potential erosion and sedimentation into the wetlands, so I want to know if there is something in addition that the applicant can recommend as far as procedures, guarantees, ways to construct this, ways to retain it for the future so that it is always level and it doesn't cause the problem that I see too many times.

The final question before Segrun comes up, is I would like for the applicant to tell me what they think the long term hydrology will be for each of the storm water wetlands. Obviously I'm concerned for all of the wetlands, but especially number three.

Sigrun, would you come up and ask your questions?

I'll hang out here if you folks have more questions. I had a few more that I jotted down, but I'll do those at the end.

Sigrun Gadwa: I'm a Plant Ecologist, and have a masters from UConn, Bachelors from Brown. So, the this is an unusual site because it has trap rock not only under the ridge but extending all the way to the east and under the wetlands. The soil has been derived from the minerals, volcano materials, they are high in calcium, whatever and there is, where ever this geology happens we have a high plant diversity and more rare species and more uncommon species as well. The DEP has specified the trap rock habitat with several subclasses as critical habitats. We ran into this, we were looking, assigned not to look at the upland habitats, the ridge cracks, the outcrops of which there are many, but the wetlands, but in surveying wetlands two, the central wetlands, we ran into this population of a tree that I had never seen before, it looked kind of like a poplar, but the leaves really were different, the bark was different and I picked leaves and twigs and took pictures, turned out to be a threatened specie Swamp Cottonwood. There's a lot of it there, maybe hundreds of plants on the west side, on the center of wetland two. It is a tree of true swamp with extended (inaudible) for most of the year. So that was not only the vernal pool specie, the amphibians, but also that tree, and it also makes one wonder since there is so much of it why wasn't this identified earlier. We're asking if the applicant can go out there and count the trees and fill out the NDDB Rare Plant Form and take care of that, that is required when a specie turns up.

Chairman Block: Can you repeat that, what is the NDDB?

Sigrun Gadwa: The Natural Diversity Data Base, NDDB is the section of DEEP and the section of wild life division that handles all rare species records and all that.

Chairman Block: Is that an obligation by statute or regulation?

Sigrun Gadwa: I think it's.....

George Logan: It's something that, I'd don't know that it's a statute, per se, but when you find it, what we've always done is fill out the forms, so I think that's what Sigrun was expecting, so the DEEP, and there is obviously someone there from DEEP, they said there was no occurrence of rare species on the site, and if we do have one there and it is truly verified then I think they need to know, and be able to comment.

Sigrun Gadwa: They talked about the Peregrine Falcon in the ERT, in that section. So, just, we were curious.....

Chairman Block: Speaking to the tree, do you know of functional values of that tree?

Sigrun Gadwa: Well I do know that all poplars have an unusually large variety of insects that feed on them. They don't just have two or three species of insect, but dozens of them, so they are especially favored by birds that are looking for insects to feed their babies or before migrating, so they are for foliage greening they are important. I think because they're, because we run into them so seldom, we don't really know, I don't know much about the hydrological tolerance and what kind of resilience they might have in the face of change for that wetland.

Chairman Block: Would you say it's an indigenous specie to this area.

Sigrun Gadwa: Yes, it's indigenous and very rare. It is the first time that I have ever seen it, and I've been plotting for twenty years here.

Commissioner Paskowitz: How much that species is outside of the wetland and the hundred foot buffer area, did you notice?

Sigrun Gadwa: I think it's all in the wetlands.

Commissioner Paskowitz: Okay, just in the wetland, none further....

Sigrun Gadwa: It really is a swamp species because it likes very wet conditions. The other species that is very abundant in that wetland is Button bush and that made us wonder if we could have a little more detail on the techniques of sweeping back and forth, going through that extremely dense Buttonwood. We thought the number of wood frogs counted was low at 23 and for a comparable size vernal pools we typically would find 120 or so, and it is easy to miss a wood frog raft, which is consolidated in one spot, so we wondered how close together the sweeps were and what the techniques were for moving through the Button bush. Also, the fact that they found lost of wood frog tadpoles would also suggest in fact, that there were more masses.

Another question, you notice that there were minnow trappings at the first stage, actually before the eggs were laid, and have there, is Dru Associates aware of any studies of, as to whether the stress of being in traps, in minnow traps or whatever can cause individual to resort their eggs and actually not breed, not lay eggs after all. That's a question and I have a vague memory that I heard that somewhere, but I didn't write down the reference and I'm wondering if Dr. Abrams has any information on that. The, for the impact analysis, do, was the fact that the juveniles of both the salamander and the wood frog don't orient. They just set off in a particular direction, and they, they're not able to choose, I'm not going to go into the subdivision, I'm going to go into the woods on the east side. That means that there will be a significant loss every year of the babies, that happen to head off in the wrong direction because they don't have enough capacity to choose. Just, was that reduced productivity

taken into account in the impact analysis? The other question, when we do vernal pool survey, we take note of which side, especially in big ones, where the egg masses are concentrated. Sometimes there will be a lot on the east shore, sometimes a lot in the north corner, or northwest and that can correspond to movement from the east, and they will lay their eggs close to the shore on that side, so we, the assumption that there is a completely even distribution of these amphibians in all of the woods, in all directions, is not necessarily true. Maybe there are a lot more shrew burrows in one area, and for the higher density to the southwest, and it's possible that there is a high density in the area that is going to be impacted, where the proposed subdivision is, to the east and a clue to that could have been concentration of egg masses along the east shore. So when they are putting together the additional information, in response to the questions, that would be another one that would be helpful, if there is any kind of map of the distribution.

I wanted to point out that we were a little disappointed in the relative sparseness of data on fauna other than the amphibians, and the fact that we have almost a half mile wide forested tract here, it's 2,200 feet wide, it's really a surprising large area for a forest that is surrounded by you know, densely developed Newington and Wethersfield. That means not that there is greater ecological integrity and greater biodiversity. There are a lot more bird species that will use a forest of that size, that will use the wetlands and the interior, wetlands one and two, because many wild life species are shy, they you know are sensitive to noise and light and human disturbance, but they use the larger tracts, so how, and there is a food chain, ecological web that is different in a larger complex system like this. For example, we saw Barn Owls just flying out of wetland two and that keeps the white footed mice in check, small rodents. All the song birds that are in here keep the foliage insects on the trees in check. There's a, and this is applicable to the wetlands, especially the large wetland systems, one and two, as well as the upland, so you can't just say it's a habitat issue, so, just, have you thought about these kind of issues, in an indirect way? I think that's all.

Chairman Block: Couple of questions. Again, I presume that this presentation is just preliminary to your ongoing investigation, so I would like you to report back as to the obligations imposed by observing a threatened species, okay, and I would also like to have some information as to the environmental parameters that are essential to it's well being. As to, there was a discussion at the last public hearing as to the effectivity of the amphibian pathway, tunnel. Given the difference in elevation from the inland outlets at the two ends, which is about nine feet if I read correctly, the question is, is this a one way trip, or is it going to be a two way for both habitats to use, what is the implication for the population, the preservation of the population, the optimal populations that are available. Forgive me for categorizing it, but I almost heard that it was a throw away structure tonight, in the comments and I don't like doing something for gestures that are not going to be cost effective. So I would like to have some information on that. Thank you. Anyone have further questions?

Commissioner Clark: I'm just going to ask when further questioning is appropriate? For example, I would be tempted to ask questions in response to additional Dru Associates report that I just received. Would it be more appropriate to ask these at the next meeting, for example, if I were to ask what their opinion is on comments about tidal remediation for example, where that was rejected by Dru Associates as a relevant topic.

Chairman Block: Well, if you are asking as a technique, I presume they might comment tonight, if you are asking how it applies to this site, they may have to investigate....

Commissioner Clark: That is my question, as it applies, my questions apply to this site.



George Logan: It probably would be best for me to get the information that has been provided, tonight or in the past couple of days, and go through that and have a unified approach to this. I did have one last question, and this had to be for the blasting experts, and that is, there is always a concern and I'm not a blasting expert which is why I ask this, if you are close to wetlands, concerns of nitrogen residue from blasting if that is somehow incorporated and reaches the wetlands. And also for dust suppression, and phosphorus that might be released into the environment and what measures should be considered and employed in order to ensure that that doesn't happen.

Chairman Block: An overall question, your comments both as to missed opportunity for additional investigation prior to this, but also the fact that we are entering into the winter season. Legitimately, how much opportunity are you going to have to obtain any new datum on these subjects?

George Logan: Well, some of it you can, because it is not necessarily season dependent, for example, what happens if you get lucky and get a rain, they can certainly do some of the soil borings that we mentioned, they might have some of that data already, but yeah, as far as assessing the full diversity of the vegetation, it's been a lost opportunity and of course they couldn't retrieve that until next season. So it would be up to us to do the best we can with the information that they can provide and then have the Commission decide if this data that should have been in the record and is not in the record that's important for them to make an informed decision.

Sigrun Gadwa: I think what I am going to do is to consult with the Connecticut Botanical Society to see if, I think I read that they had done a trip there, botanical inventory, also the Hartford Audubon, there may be some data from that source, so there may be some existing data from experts who have just spent time on Cedar Mountain.

Chairman Block: If I might suggest, if you do come up with any of that information, I'd like to have the prime source speak to it, rather than have it be hearsay.

Sigrun Gadwa: Okay, that sounds good.

Chairman Block: Any further questions? May I have a motion?

Commissioner Clark moved to hold a ten minute recess. The motion was seconded by Commissioner Paskewich. The meeting adjourned at 9:10 p.m.

Chairman Block called the meeting back to order at 9:22 p.m.

Chairman Block: Forgive me for showing preference, but I believe the Town of Wethersfield had comments they would like to make.

Attorney Mark Branse: I'm acting as a special attorney for the Town of Wethersfield. We are really here in two capacities, one is under Connecticut General Statutes 8-7 D (f), there is a requirement for notice to a town that is abutting a project or where the drainage or storm water will be flowing in the direction of that town, and also we have filed an intervention 22-19 at your last meeting. I'm joined here by Mike Turner who is the Town Engineer of Wethersfield, and also the Director of Public Works, and by Jeff Bridges who is the Town Manager of Wethersfield. We are here because a portion of these wetlands do flow into Wethersfield, part of the site in fact that is the disturbed portion site, and I'm going to ask Mr. Turner just to show you a map, we have several copies of it, that points where the discharge points are, and the wetlands as they reach in Wethersfield. Mr. Turner?

Mike Turner: I apologize, we are going to put one up there. I apologize, I didn't know that we needed to bring twelve. I'll get you copies.

I think you can hear me if I speak up. My name's Mike Turner, I'm the Town Engineer and the Director of Public Works in Wethersfield and we just wanted to just show you a brief map that kind of depicts why we are here and why Wethersfield has concerns about what is happening with this development. This map happens to be an MDC map that we use as our storm water inventory map, so all the little black dots that you see on that map are actually catch basins and the little dash lines are connecting pipes within Wethersfield. The Toll Brothers site being developed is kind of off this site, but it's bordered on the north here, the east side here, which is the town line, and here. There are four points of discharge of storm water that leave the site via detention basins and or connections into the Russell Road storm drainage system. Two of them enter and exit the site at the north east corner, they go into a system that is a town owned system in what we know as the Crossings development in Wethersfield. All of that piping system goes down and drains down into this large wetland here in Wethersfield, what we call the Wetlands C-1 in our wetland inventory map. A third discharge point is about midway in the development, this discharges to a cross culvert under Russell Road, there is a piping system through there that basically runs overland through this private property which is know as 61 Arrow Road, ultimately discharges into a storm water collection system, and again, into this wetland in Wethersfield. Then there is a discharge point from a detention basin in the southeast corner which connects into a storm water system in Russell Road, this connects in through Route 175 and the Berlin Turnpike at various points and gets into this wetland in Wethersfield. You can see all, virtually all of the storm water that leaves the developed Toll Brothers site ends up in Wethersfield in our wetlands. So that's why we're here, we're concerned with how this development is going to protect our wetlands as well.

Chris Greenlaw: Mike, could you explain or clarify when you say all the water, all the water from the three storm water detention ponds on the eastern side of the property, not all the water from the whole site. I just wonder if you would clarify that, correct?

Mike Turner: That's correct. That's all we really wanted to present, we have reviewed the plans, the report that had been submitted with the original application. We understand that there are revised plans, we have had an opportunity to meet with Toll Brothers staff and with their engineer to go over the comment letter that I submitted to you folks and we understand that Toll is in the process of reviewing those comments and are making changes as they see appropriate. We're just looking for the opportunity to be able to comment on those responses so that we can feel satisfied that our wetlands will also be protected.

Chairman Block: Would you please clarify what your concern actually is. Is it the amount or is it that you want it to go somewhere else, or is there some other method of discharge that you would prefer. What is your concern in regard to the water entering into your site?

Mike Turner: For the most part all of these storm water discharges are exiting via some type of a detention system. There are several detention ponds being proposed on site. Other experts have looked at the water quality issues and things like that, what we are concerned about primarily is the maintenance of those detention basins. We're told that that is either going to be done by homeowners association. In my professional opinion the homeowners association in this development don't have any vested interest in maintaining those basins because they live up hill of the basins. We're down hill of the basins. If there is any issue with maintenance, with lack of maintenance, failure to maintain, sedimentation, erosion, when these things fail, they are going to fail and impact Wethersfield.

Attorney Branse: What I was going to do is just sort of summarize. As Mike said, the means, the maintenance is very important. We want to be sure that if the site is cleared in a single phase that the erosion control be, it be quite rigorous. As Mike indicated, we did meet October 26<sup>th</sup> with representatives of the Toll Brothers, with Mr. Rossi and also Mr. Gradwell, I have also been in touch with Attorney Regan and we know that items that Mr. Rossi mentioned specifically was the documents for the home owners association can be drafted to create enforceable long term maintenance plan, and also, that the engineers need to create that maintenance plan. They have advised us that they are in the process of doing that. That's, I think that is our largest concern, and it is addressable. It is something that can be resolved, and we understand that they are working to resolve that now. We certainly will want the opportunity to review that when we see those documents, but our meeting with Toll representatives was very cordial, very productive and we don't want to be here in favor, or opposed, that's not our proper role, we feel we have identified, and by the way, if anyone needs copies of the report, I have another nine copies, this was submitted last week, but I don't know if it was in the Commission's packet or not. We did provide simultaneously to the Toll representatives also that Mike did do six different reports that correspond to each of the six reports that Toll submitted, so you can sort of match up each report or each document package that they submitted with our review from Mr. Turner.

Chairman Block: I'm pleased to hear that you are working it out, but I'm also a little bit concerned because it seems to me, and I'll certainly have staff look into it, that this is really a public works issue, rather than wetlands and I'm not exactly sure how our jurisdiction controls it, but again, to the extent that you are working it out, fine and dandy.

Attorney Branse: We certainly can help you, and I think that we will, but the reason that we feel that it is a wetlands issue is because, and again, because of the lateness of the hour, I didn't want to go into any details from Mr. Turner's report, there's like fifteen pages of reports, but we have had an actual experience in Wethersfield where homeowners association don't maintain the detention ponds, they fail to function, and we get direct impact on wetlands, so these are systems that can work, if they are maintained. The other sorts of things that we have inquired about really many we have already heard this evening, things like additional detail about the size of the detention ponds, the sizing of the pools, they were raised by Mr. Logan, they were also reflected in Mr. Turner's reports so some of the things that Mr. Turner raised, you've gotten from other sources as well, but that is why we feel that it is a wetlands issue, because if the maintenance, our experience with the maintenance won't occur unless there is a vehicle to assure that it occurs and it can be done, I emphasis, it can be done. Attorney Regan has told me that Toll Brothers has a unit that does these kinds of condo documents, they have experience in them, and we are looking forward to seeing that. Thank you very much.

Chairman Block: Okay, now we'd like to hear from the public from those who are in favor of the project? And again, please your name, address and if you're referring to materials you have to cite them and provide us with twelve copies, and of course, given the hour, please keep it brief and on point. Anybody in support? Seeing none, anybody opposed. There is a list up there that you have signed on, and the first person?

John Bachand, 56 Maple Hill Avenue: I wrote a letter, a lengthy letter, I'm not going to read it, I'm going to give you twelve copies as you asked for and there are very specific information that I found up there. I'm submitted a letter to the Commission addressing concerns I have regarding the development on Cedar Mountain and the effect it would have on the wetlands. I'm referring to this wetland here, if you could help me out, what is the common term for this one? Number one, number two, central?

Commissioner Igielski: Number two.

John Bachand: Number two. In my letter I've brought up these issues because I have some experience, I've been a contractor for thirty years, I do drainage work, mostly the restoration and repair side of it, I don't do new construction so after all the engineers are gone, we are the ones who come in after a year, five years, ten years later and have to see what was done, so I have a little bit of an understanding of water related, especially storm water related problems. So when you get a chance, read that letter. There is one very specific area that I believe needs further expert analysis and I referred, if you just want to look quickly, it's the second page, the second, third and fourth paragraphs, and there are actually pictures on the third page. There is actually damage to the embankment or the berm or the bank that holds the wetlands and I believe if I'm correct the wetland has been in a serious state of decline already and I believe any further impact there could have serious effects on it, even further. So I specify that more in that letter, when you get a chance, you can read it. I just want to address a couple of things that I heard here, but also on, there is a quick, if you look on the back, I clipped two more pictures on the back and that is from the plan itself. That is from sheet 8, no I'm sorry, BN8 and you will see the detail of the storm water and sanitary sewer connection and very interesting to note some point grading or loose cover for collecting subsoils, drainage and floor watching. If you look, that drain is discharging into the storm water system, eventually it is going to end up in the detention basins and eventually into the wetlands, obviously, the ones that discharge into our wetlands, and the wetlands that go into Wethersfield on the other side. I mean, that's a recipe for disaster, that might just be a cookie cutter detail here that they put in, and maybe they didn't really intend to do that, but that's a clear example of a disaster waiting to happen because there would be household pollutant, every home workshop pollutant is going to end up in that hole and is going to get washed down that hole. It shows in the second picture there, and it shows in the profile the open pit again, that should probably be a closed system, which is not common. We all have sump pumps, they are all open systems. This might be an occasion for something a little out of the ordinary, a closed system. I also talked about the utility trench, you can read that later. As far as, I'd like to bring up one other thing, because the Commissioner challenged Gary Bolles about the, to find out if the Army Corps should have any jurisdiction over this, it piqued my interest so I made a few phone calls and he is going to speak more about that, but I've been in touch with them as late as 4:45 this afternoon. They are quite interested in this. They did indicate that they would not be requiring a permit, but they still have jurisdiction, so to say that they don't have jurisdiction is incorrect. They always have jurisdiction, matter of fact, for a federal agency their definition of jurisdiction is quite simple, it's on one sheet of paper, it's called Waters of the United States. That's pretty broad, and also it was mentioned that this is not a tributary to a waterway, it actually is, the runoff ends up in Piper Brook eventually and then eventually into the Connecticut River. It's Mill Brook, I can map the whole thing out for you if anyone would like that. It drains off here, part of it goes this way, part of it goes this way, and this is what I talked about in the problem part of the wetland, the bank of the wetland being in serious condition. It eventually ends up down here and makes its way into Mill Brook and then into Piper Brook. As far as the biofilters go, I'm not too confident in those either. They're a six inch high mound of dirt actually, and they're going to be on, I believe they are on private property, is that correct? If anyone knows on the Commission? Anyway, they are six inches high and on a sloped terrain so pretty likely that those will get blown out and the thing is, they don't have to get blown out in the whole entire length, it's like a chain, it's only as strong as its weakest link and someone referred to it before as a break out. So if you get a break out at any one point the thing will fail everywhere because the water will just drain through that point. So, unlikely, again I don't know how much that is factored into this whole hydrology back to the wetlands, we know that is the most critical point, back to the wetlands, so how much that is factored in, that should be considered also. The blasting effects, we have heard some controversial, contradicting statements. Someone said, no, there should be no water able to travel down those fissures, I'll call them, you used

another term, but then someone said, referred to looking at the cut rock on Cedar Street. If you look at the cut rock on Cedar Street which is that same basalt formation you'll see the water coming out of those cracks from all different levels, from the ground to the top. Sure, some spills over the top but some is actually coming right through those fissures at all different levels at all different points, we've all seen it all of the time. Just an anecdotal look at that. Some one mentioned the aquafir, this is definitely not an area that I'm an expert in, but, anecdotally I can tell you that this thing here, anytime of the season, middle of the summer, this thing is always flowing water. All the time, it never stops, there's always a little bit of water. I was up there two weeks ago, I was up there five times since this last meeting and this thing always has water flowing in it, so this thing is dry this year, which I was surprised when I heard it at the first meeting, but it is very dry this year and that is why I think, I've pointed out, some of the reason I believe why it's dry is because it is in a bad state, but typically that thing had at least a foot of water in it at all times, so I believe that it is getting not just surface water but I believe it is from snow melt over the area, over the water shed area that was also feeding that because I don't think it would have held that much water just from runoff, especially at all seasons. I've been up there at every different season and it's always had water. This year it is dry, so I just think there are so many unknown factors since the main goal is to get the water back to the wetlands at the same rate, the same volume, the same quality as it's doing now, and I believe that there are so many unknown factors that even with this comprehensive storm water management system, that's not possible. It's not possible to compensate exactly for it, let's put it that way. Thank you.

Chairman Block: Next is Gail Bedrajko.

John Bachand: Can I just say one more thing? If you know, I don't know how many of you have ever been up there, to physically inspect it, but if anyone of you wanted to go there, I'd be glad to volunteer my time to direct you to where the worse part of that problem is that I point out in that letter to you. So, open invitation.

Gail Bedrajko, 21 Isabelle Terrace: First, just as an aside, I want to comment on the requirement that the public has to provide a minimum of twelve copies on the items that we want added to the record. I have attended other public hearings and meetings and council and submission of multiple copies of documents was not a condition of acceptance into the record. So I question, is it fair and is it the right thing to do? We agree that one written comment must be provided for the record, but to expect the public to make multiple copies of documents does create a burden. There are those of us who don't have access to a printer, either at home or at work and must rely on public resources such as the library. At fifteen cents a page, a ten page document costs eighteen dollars. We get into twenty, thirty, forty page documents, the expectation for the public is that on an individual basis is unrealistic. It could put a burden on some of us and limit participation restricting the flow of information that you would receive to make the decision that you need to make. So I ask that you re-think this in the future to avoid dismissing or rejecting information because of this arbitrary directive. I have some comments regarding the minutes of the last meeting where it was stated that I read a prepared statement into the record providing an overview of my opinion. I did not provide a copy and (inaudible) for the record. What I did submit into the record was documentation that June, 2012 EPA report regarding the settlement with Toll Brothers, where Toll was cited for 600 storm water violations and 370 sites in 23 states including Connecticut. The violations were discovered by EPA through site inspections and documentation by Toll Brothers. According to the EPA, the majority of the violations involved Toll Brothers quote, repeatedly failure to comply with permit requirements at construction sites, including requirements to install and maintain adequate storm water pollution controls. My point in bring this up was that it wasn't an isolated incident but a pattern of negligence and non-compliance. As I said, I did submit documentation following the directions that we were given

by the Commission at the meeting, but apparently it did not make it into the minutes of the meeting, so I am re-submitting twelve copies. And I won't be eating for the next week, but.... I have one additional comment for tonight. There is apparently disagreement between the paid consultants of Toll Brothers and the more independent experts on the impact of activities on vernal pools and adjacent and/or abutting wetlands. Conclusions should not be based on seasonal aberrations and short time periods of observation. If there is insufficient evidence at this time to make definitive conclusions on the impact on activities during construction and long after the construction is done, on water quality, on water levels, water drainage, water flow, then the Commission needs to think of the long term. Are we going to sacrifice these irreplaceable wetlands and vernal pools, small as they may be for the sake of a housing development that is not needed and likely to cost us more in municipal services than we will gain from tax revenue? I ask that we err on the side of caution and conservation versus the side of construction. Thank you.

Chairman Block: Thank you. Roy?

Roy Zartarian, 25 Stuart St: First since the issue of what was brought up in regards to comments that I made at the previous public hearing, I would like to know whether the precipitation figures you are given by Dru Associates for the last eleven years also includes snow melt. As you recall, 2011-2012, we had very little snow falling, and that I think even Dr. Abrams will agree with me is a factor in the depth of water in vernal pools. Next let me note too the wonderful news about the swamp poplars, if indeed they are submitted for the National Diversity Data Base, that will be the second listing for Cedar Mountain, the first being the nesting Peregrine Falcons on the Balf Quarry Cliff Face. I know about that first hand because I was the one that made that submission. I was taken to task for my use of the word *fitoremedation*. I'm going to, I was able to locate the quote that was the basis of my use from the New York Times and I will provide the full article to the Commission, twelve copies with my name on it tomorrow, and I quote, trees are nature's filters capable of cleaning out the most toxic wastes including explosives, solvents and organic wastes, largely through a dense community of microbes around the trees roots that clean water in exchange for nutrients, a process known as *fitorememdation*. Now I brought that up at the last public hearing with regard to loss of trees, and the impact on water filtration and since then I have come across research which is another value to the role of trees and that is the impact on wildlife's ability to survive drought. There was published at the end of October or early November research done on a species of butterfly in England and how it was found over several years that forested areas helped that butterfly survive drought conditions. Now even though I'm president of the Connecticut Butterfly Association and would very much like this discussion to be about Lepidoptera I know your concern is more properly directed toward amphibians. So I contacted the author of that article and asked him about it, and he directed me to research done in 2008 published in the, oh, that's the wrong one, excuse me, research done in 2007 in Global Change Biology study in Finland which basically came to the same conclusion that in this case, the species of frog was found to benefit by having greater tolerance for drought because of the habitat structure around it, the wooded habitat structure. The short version is, you compromise habitat structure you're going to compromise species ability to survive drought. Now until Mr. Logan and Ms Gadwa came, much of what you have heard about amphibians has come from one source. I am, would like to present to the Commission, submit to the Commission a paper called Best Development Practices concerning Pool Breeding Amphibians in Residential and Commercial Developments in the Northeastern United States. I will note that if you pay attention to the response to the CERT report from the Dru Associates you will know that this work was somewhat I think belittled unjustly. The authors are both PhD's, the authors are Arum Calhoun and Michael Clemens, they are both PhD's, Calhoun is a Professor of Wildlife and

Ecology at the University of Maine, Clemens is an Ecologist with specializations in herpetology, conservation, biology and land use planning and they have both written extensively on this subject and I think if you look at the list of publications, I think Clemens is extensive, is extensive. By comparison, other than statements we have received, from one of the principals, there is little similar information available about the qualification of Dru Associates. So you take a look, and I do urge you to read through this, it's very easy reading. One of the big discrepancies or the more troubling discrepancies between the Best Development Practices and the Dru mitigation report is that of an acceptable buffer zone. We generally have been seeing from Dru Associates the hundred foot buffer for amphibians, Calhoun and Clemens are recommending a seven hundred fifty foot buffer. They cite research that shows that a 150 foot forested buffer has proved insufficient to prevent extirpation of wood frogs in one location. They cite research that shows a small degree of development affecting twenty-five percent of the surrounding habitat. They cite a negative impact on vernal pool wild life despite the forested buffer. Even an article cited in the Dru Mitigation report, that by Harper and others, the article that appeared in Society for Conservation Biology in 2008 states, and I'm quoting from the abstract, a copy of which I will get to you, these simulations, these are computer simulations on migrations, these simulations show that current state level wetland regulations protecting thirty meters, that's just under a 100 feet, or less of surrounding terrestrial habitat are inadequate to support viable populations of pool breeding amphibians. It goes on to say, our model results demonstrate that a high probability of local amphibian population persistence requires sufficient terrestrial habitat, the maintenance of habitat quality and connectivity among local populations. It used to be location, location, location, now it's habitat, habitat, habitat.

Moving on to the biofiltration system, the swales, it's an established technology, however I will note that in the mitigation report the example you are shown, comes from a golf course, not a residential development. You have to realize that a golf course has a predictable and controlled use, system of maintenance, you can't say the same thing about a residential development. There are issues connected with biofiltration systems that the Dru mitigation report didn't address, however they are addressed in this Guide from the State of Oregon Department of Environmental Quality and, and it's called biofilters, guidance for using bioswales, vegetative buffers, and this guidebook highlights potential construction problems, such as timing of construction of swales to prevent seed from being washed away, the issue of heavy sedimentation from construction site runoff, and you all know that Toll Brothers is no stranger to construction site runoff. Cost cutting in the selection and planting of vegetation. The issue has not been addressed as to the monitoring of the efficiency of filtration, nor are maintenance responsibilities identified, who is going to trim the planting, who is going to mow, who is going to water during a dry season, is this going to be left up to homeowners, or is a homeowners association going to be charged with it, these are issues that would need to be addressed if this goes forward. Finally we come to the ditch, or pardon me, the new wetland basin which is apparently intended as a new breeding pool, it's what Calhoun and Clemens call a created wetland. The questions that arise, particularly from this, Calhoun's, Calhoun and Clemens' work are, would this basin contain structural diversity, microhabitats and hydrology to support specie. Will it prove attractive to believe it or not, predator frogs like bullfrogs and green frogs that at the expense of vernal obligates. From my reading of the mitigation report I've, I understand it looks like the bottom layer will be trucked in, and laid down what if something non-native or harmful be introduced in that sediment. What is going to be done about the habitat's surrounding this basin. Who is going to monitor and maintain the health of the basin? Is blasting going to be required to open up the basin? If I were really nasty I would ask if the basin were going to be used to cover a pit used to bury construction waste as Toll did in the Philadelphia area, and I'll provide documentation on that tomorrow, and finally let's not forget that this basin is the one where among all the planting palate Dru Associates has proposal including the invasive plant, the yellow iris. Thank you.

Chairman Block: Gary Bolles is next.

Gary Bolles 28 Burdon Lane: Members of the Commission, in addition to my letter of November 1, 2012 in answer to Chairman Block's asking me to show why a developer or town would need to follow federal guidelines when dealing with federal (inaudible) in any proposed development, I state the following, The Army Corps of Engineer defines federal wetlands as consisting of hydrosol, hydrology and wetland plants. These three components are all present throughout Cedar Mountain. All developers and municipalities must abide by the federal regulations. No one is exempt. Should an area contain only hydrosol, then it falls under the State of Connecticut jurisdiction. In the federal wetlands jurisdiction across from my home, the developer began to fill them in without a federal permit. Additionally, trucks bearing the Town of Newington seal dumped blacktop pavement from the reconstruction of Richard Street in the same area without a permit. In one instance where the town truck was backing in to dump its load, the truck tipped over on its side. U.S. Army Black Hawk helicopters took aerial photos of this serious violation. That is why Newington was enjoined in the federal investigation. Newington officials acted very poorly in this whole matter. Now, I direct your attention to this Town of Wethersfield letter that was sent to our Town Planner dated the seventh of November, 2012. In the last paragraph on page 2, it states, the Newington Walk Plan is substantially different from the one approved in 2011, and per requirements of Section 5.2.7 of the Newington Zoning Regulations, special permit triggers requirements for a new petition and public hearing for the special permit application. I want to publicly thank the officials of Wethersfield for their due diligence and extensive communications to Newington officials. Why our town officials couldn't raise some of the same concerns that were noted in the correspondence brings many difficult questions. Because of the numerous changes this smacks the appearance of a completely new proposal which lawfully requires a totally new hearing by our TPZ Commission. Commissioners, you should save yourself and us the time and trouble you are expending to hold these hearings on an application that could be moot. Until such time as a new TPZ hearing is scheduled your hearings on this matter should be suspended. In addition to this paperwork, I am also passing in additional information that needs to be made part of the record regarding the Newington Walk development. Thank you.

Allison Clark, 25 Wilbur Drive: Good evening. My initial comments pertain to the August 29<sup>th</sup> letter from (inaudible), which was part of the application. It was noted that the report was prepared by highly respected experts in their field from various state and federal agencies. They were not paid for their participation, and they have nothing to gain if the Newington Walk project is approved. The applicant's experts are paid for their participation, and they will gain if the development is approved. The Dru letter says that they have not defined basin three as a vernal pool because the strict definition for such disagrees with DEP's guidelines for a vernal pool. In Connecticut, defines a vernal pool on the basis of wildlife that makes use of this type of habitat. By the way, it's the EEP, not DEP and it has been for over a year and a half. To meet the definition, according to the DEP website, of a vernal pool certain criteria must be met. It contains water for approximately two months during the growing season, it occurs in a defined depression or basin and lacks permanent outlet or stream, it lacks fish population and it dries out most years usually by late summer. In the background geology section of the letter, Dru Associates disagrees with the CERT statement that the site is underlying by basalt which is fractured in Tectonic Creation and subsequent glacial history. They respond that the fact that the bedrock is filtered and fractured indicates that the hydrological supply to the site's wetland basins is not from deep groundwater expression, but rather from precipitation based flows. I would like to enter an article into the record about trap rock ridge line. It was used by the Town of Newington in their Cedar Mountain presentation if any of you recall that. It used to be on the web site but it's been taken down, I think maybe because of this application, but anyway the article is entitled "Ecological Habitat and Land



Use on Trap Rock Ridges written by Jim Gibbons of UConn Cooperative Education system. The article is referenced and on page 3 it states, (inaudible) joints formed when basalt cools produce numerous spaces that collect and transport rainwater. Rather than being viewed as a pile of rock, the trap rock ridges should be respected as a major water retaining system. Water moves through the rocks eventually migrating down slope. Cedar Mountain is referenced in that article. I have twelve of those for you. Also, in the letter, by July 2012 basin two as a central wetland was dry with only a mud puddle, basin three, the vernal pool was nearly dry at the end of March. In March of 2012 there were no indications of pond breeding activity at basin three and limited activity in basin two. He concludes the short hydrological cycle observed in basins two and three show that they are not reliable for support on pond breeding species. Number one, it also states that in 2011 basin two was forty percent larger and basin three was four times the size with water depths in excess of three feet from March to May when biological activity takes place. Dru's conclusion states that (inaudible). Number two, the CERT states that basin two, the central wetlands has fingernail clams, robust populations of spotted salamanders, and a large population of wood frogs, which Dru does not deny. Last year I presented a letter from Julie Victoria of DEEP, a retired wildlife biologist. Julie recommended a publication entitled, Forest Habitat Management Guidelines. I am resubmitting this guideline and her letter for the record again. This article on page 3 states, vernal pool indicator species may not breed every year and pool that do not support indicators one year, may support them the following year. So even if you accept Dru's statement that basins two and three are not reliable for pond breeding species or you accept his conclusion that basin three is not a vernal pool, even though it was a dry season, the forest HMG, Habitat Management Guideline, states that land managers may elect to implement the vernal pool HMG's around pools without current evidence of indicators species with the expectation that in the future, the pool may function as an active breeding site. The HMG recommend vernal pool protection zone of one hundred feet, and an amphibian protection zone of one hundred to four hundred feet measured from the spring high water mark. To recap the first few pages of the Dru letter, or two pages, essentially focus on basin three not being a vernal pool, and they critique the importance and quality of the wetlands. The next couple pages discuss the filling of the vernal pool which is a moot point right now. In the last few pages Dru criticizes the CERT statement that Dru grossly underestimates the acreage needed for the central wetland buffer. He dismisses the CERT and other expert computer simulations model table and or methodology. He criticizes Clemens and Calhoun who basically wrote the management practices which you received and he criticizes, oh, Calhoun by the way also took part in this forestry, HMG's. I did not provide a copy of that, but I'm glad somebody did because it was sixty-five pages. I gave you a link to the site, in case in want to find it on line though. The CERT also said you underestimate the acreage needed for the central wetlands. The Forestry HMG recommends one hundred to four hundred feet, Calhoun and Clements as someone stated, recommend 750 feet be considered with seventy-five percent being kept undisturbed. On page 30 of that report you have, it says they recommend 386 feet minimum buffer for spotted salamanders. Using the Harper et al., simulation Dru concludes on page 7 that four acres of upland habitat would support the female spotted salamander population and since they are giving forty acres to the town, it's more than what they need. The next paragraph states that with the Harper et al model that not more than fifteen acres would be needed at Newington Walk. I assume that he means for basin two. So, whether it's four acres or fifteen acres, the issue is to me, whether or not the one hundred foot buffer is sufficient or not, regardless of the deeded open space. I'm concerned about steep slopes, rocky soils on the easterly side of the wetlands. Essential wetlands sit at an elevation of three hundred feet, the homes sit at an elevation of 330 feet, that's a thirty percent slope. With the slope and the rocky soil, I think that could increase the probability for contamination into the wetlands with a faster wash. I would like some clarification on that. Now I know that the town's buffer minimum is 100 feet. We ask that you please consider a greater buffer given all of these conditions, steep slopes,

rocky soil, high quality wetlands and the critical habitat. Also, I just wanted to mention, on TPZ's approval, condition number two states that storm water management basins will be the responsibility of the HOA and condition number three says the applicant will submit to the town engineer for approval the draft storm water management maintenance plan that will be the responsibility of the HOA to implement. I think that it is important enough, and I think that maybe somebody said the, that it will be submitted, but I hope that this Commission not just the Town Engineer, no offense to you, will also have some input on that report. Lastly, just some in general observations about the blasting report. I don't really understand much of it, but what I can tell is that it is very vague. It says things like, (inaudible) should be considered, for deeper elevations, vertical decking or charges should be considered. Application of these guidelines should result in effective rock removal and should result in good rock fragmentation. While again, while I don't understand the complexities of these things, when it comes to blasting, common sense tells me, if bottom hole stemming or vertical decking are good things, maybe the report should say, it will be done, not it will be considered and all of this, should result language is merely for their own legal protection in case something goes terribly wrong, and then they can say, well, we didn't guarantee it would result in effective rock removal, we just said it should result that way. So, I think they should be more conclusive about their procedures in the blasting and what it will do. Thank you.

Holly Harlow, 11 Edmund St: Good evening. One of the first sentences or comment made about this new application is that there will be no, the factors provide for no impact on the wetlands. In the last couple of weeks I've been talking to various wetland people, herpetologists, people I can find for information so that I can better understand it myself and I recently spoke to a professor and herpetologist at a Connecticut State University who told me, there's always impact when you build, on the wetland habitat. There's always impact, and I think we are seeing tonight with the consultant that the Commission engaged just how many more ways this wetland habitat can be impacted, and this is just the beginning of the information they may come up with for us. This Cedar Mountain habitat is valuable, it's fragile, and it's, within this development it's being coerced into fitting into a development instead of a group of homes being placed harmoniously in a wetland habitat. If what comes out of this discussion, the facts and promises that come out of this discussion cannot guarantee the integrity of this wetland habitat, this perfect place in nature, if it cannot guarantee protection then I would urge the Commission to deny the application. Thank you.

Chairman Block: That is the last speaker who signed up. I'll give somebody a chance if you have changed your mind and want to come forward.

Wayne Alexander, 28 Burdon Lane: You know what strikes me as a little strange is that you don't have anyone in favor here, of this application. And one of the things that also strikes me as a little strange is the fact that I don't know how many of you have actually been up there. And this is the question that I really want to ask you. Do you want these people to come in here and maybe, I don't know, say maybe twenty-four, thirty-six months down the road, write the government for a consent degree, write another big check, and say yeah, well, you know, we violated a lot of stuff. Who do you want guarding the hen house in Newington? Do you want a fox guarding the hen house? You see, the thing that is wrong about this, is that I went up there, and I observed absolute beauty and now I find out that there is actually a threatened specie there. Took like 150 pictures up there because you know why, because this may all be threatened, this may all be a memory and you know what we're doing? It seems like what we are doing is we're robbing our children and our grandchildren and our great grandchildren of something wonderful, and that's the top of that mountain. So, yeah, this is kind of an emotional plea and I'm not going to give you all the numbers and the facts and everything, but I'm just going to tell you from the heart. From the heart you have a gem

in your town, do not, do not waste this opportunity to save this. You are a conservation commission, conserve. That's all.

Rose Lyons, 46 Elton Drive: I just walked in here after attending a Council meeting, Maidy Kinney was here earlier and she came up to the Town Council meeting and I'm going to relay to you what she relayed to the Town Council. We have been going and listening to Toll Brothers time after time after time and we have asked, time after time after time, that we be able to see these maps. There's not even a place for a map to be put, we have all this modern equipment sitting around here now, and from what I gather from Maidy, it cannot be seen from the audience. I think it's a shame that we have three big screens and we have a map over here. I don't know where it was during the presentation, but I'm bring this to this table, to Conservation, just as I brought it to TPZ, we have to be able to see as well as hear. Thank you.

Gayle Raducha, 38 School House Crossing, Wethersfield: I had no intention of speaking this evening, but I have to. At the last meeting it was stated that as of October 1, 2012 developments could no longer be required or expected to maintain retention basins, that the responsibilities would now fall on the town. Toll can draw up all the agreements they want, but homeowner associations do not have to comply. How can this committee accept the findings of Dru Associates when these same experts didn't even realize an endangered species of trees exist when it's so plentiful in all of the wetlands. Toll has had four years, this has been going on for four years, they've had four years to research every aspect of any possible impact this development would have in any way, shape, or form, but they could not be bothered to put the effort in.

Chairman Block: Anyone else?

Commissioner Clark: Three of us attended session three of our Commissioner training with DEEP and I'd like to bring back something that was taught to us, that was also encouraged to be brought to Commission, and this is just re-reading of part of the Connecticut Inland and Wetlands Watercourse Act that Darcy Winther who is the moderator at our recent session wanted us to have as a take away message, and I think some of it is a little contradictory to some of the things I think we covered during our legal renewal training, and I'm just going to read part of it, and it is Section 22A-41 and this is again, I just took a piece out and made a copy for some of us. "The Inlands Wetlands Watercourse Act allows an municipal Inland Wetlands Agency to consider all relevant facts and circumstances when regulating, licensing, and enforcing the law. Subsection A Example of Factors to Consider: The relationship between the short term and long term impact of the proposed regulated activity on wetlands or water courses and the maintenance and enhancement of long term productivity of such wetlands and water courses. This is summarized by her. B. And there is a blank there, And any mitigation measures which may be considered as a condition of issuing a permit for such activity including but not limited to measures to; A. prevent or minimize pollution, or other environmental damage; B. maintain or enhance existing environmental qualities; or C. in the following order of priority, restore, enhance, and create productive wetland or water course resources. Other part, the Inland Wetlands, the IWWA allows a municipal inland wetland agency to consider all relevant facts and circumstances when regulating, licensing and enforcing the law. This includes determining if an activity in the upland can be considered a regulated activity and establishing on the record the affect or impact such activity will have on the physical characteristics, and that's italicized of the wetland or water courses. A. Subsection C allows municipal inland wetland agencies to consider the impacts or affects to aquatic, plant or animal life and habitats in the wetland or water course. B. When the regulated activity is outside the wetland or water courses, subsection D requires municipal inland wetland agencies to, first make a finding that such activity will likely impact or affect the

physical characteristics of such wetland or water course, and second, if such a finding is made, can consider the impacts to aquatic, plant or animal life and habitats. I believe in some of our training, we emphasized the physical and our moderator pointed out.....

Attorney Boorman: Mr. Chair, we are doing a public hearing tonight. You are perfectly available to talk about that during other parts of this discussion, but really, this is not part and parcel of the public hearing. So, I'm not saying, I'm not trying to stop you from.....

Commissioner Clark: I'm done.

Attorney Boorman: Okay.

Chairman Block: As concluding business, we need to decide on the next continuation of this public hearing. I would suggest that we continue it to December 4<sup>th</sup>, the first Tuesday, I believe that is available as one of our options. Chris?

Chris Greenlaw: Mr. Chair, you probably also want to clarify that we are going to hold our regularly scheduled meeting for the other applications.

Chairman Block: Yes, that's true. The November 20<sup>th</sup> meeting will proceed as to those agenda items that have been published. Cedar Mountain will not be a part of that agenda. I believe we need a motion for December 4<sup>th</sup>, as the continuation date?

Commissioner Paskewich: The reports will be done by then?

Chairman Block: I would expect so.

Commissioner Paskewich: We should ask them.

Chairman Block: Are you going to be done by then, the conclusion?

George Logan: Probably not. What is going to happen is that the applicant is going to respond to as many of the questions and issues that were brought up tonight. Subsequent to that we will be developing a final report for them to review it before the last meeting.

Attorney Regan: The 4<sup>th</sup> gives us sufficient time to respond to what we heard tonight from Mr. Logan and also from the blasting consultant so by then we will be able to respond by them, through Chris with the data they requested answer to their questions and I think that will give us sufficient time frame for a fruitful discussion.

Chairman Block: Very good. I would like to clarify something. In light, there are two elements here that I would really like to make sure we have adequate time for proper discussion at the next, December 4<sup>th</sup>, and that is one, the implications of the claim that there is a protected species, the tree three, and what ramifications that has, and second of all, in light of Dr. Clark's reiteration of the statutory charge, that the net change in the water shed to the wetlands is not going to, is going to be within the boundaries of the species ability to survive. That it's not going to be dried out so as to cause that protected specie to die, or it's not going to flood them out, but that their habitat will be properly maintained. I am presuming at this point because I want to have a thorough discussion of the issue that the obligations imposed by the presence of the species call for that degree of concern, and therefore I just want to make sure that everybody has a chance to explore that issue, both on the side of our experts as to what is critical and on the side of the applicant as to how they are going to

accommodate the needs of that species. So with that, I believe we can table this hearing, I'm sorry, continue this hearing.

Chris Greenlaw: Mr. Chair, the topic of an extension, was being discussed?

Attorney Regan: I believe I already put on the record earlier that I would consent to the maximum....

Attorney Boorman: Yes you did, we're all set, it's on the record.

Commissioner Zelek: Regarding that I think it was the swamp cottonwood, should we notify the CERT team, because I don't think they identified that in their initial report. Maybe they want to consider that when they are revising their report, maybe they can give us some advice on it.

Attorney Boorman: Direct staff to do that.

Chairman Block: I was of the opinion that the expert, our expert would be doing it, but that's fine, as long as it's done.

Attorney Boorman: If it comes from two sources, all the better.

Chairman Block: Anything else?

Commissioner Clark: I wanted to share something that has to do with FOI and availability of information. I, this meeting is three and a half hours, our last meeting was four hours I think, and I'm somebody who works all week, and I can't go in and really listen to the tapes, so I called the Town Clerk's office to ask about getting a copy of the tapes, and it was quite a surprise to them that anybody would ask for that, and they had no idea of how to make a copy, and did not apparently have the capability to do so. FOI provides that you are supposed to be entitled to a copy at your own expense, as a member of the public. I spoke to FOI who informed me that, yes, that is true and the trouble is, if the capability does not exist within the town, you have to take the tape off site which would run the risk of losing it. That being said, I purchased a digital recorder just to see how it would work, I'm going to give it a try and see how it is, and that costs about \$150.00 and I think we should continue to pursue the ability to do this and see if it really works so we're not in violation of FOI because I don't know how I would ever listen.....

Chairman Block: I'm not certain whether or not it's really part of this public hearing but I will share this with you. I have also tried to listen to the tape, I've complained to the Town Council on several occasions that it is quite illegible, I have asked about getting paper copies and have been told that there are no budgetary provisions and I say to the audience, if you care about us being able to review this material then you let your political leaders know that it's important to the functioning of our town. I don't think the Wetlands Commission is alone in this concern, but it's a question of the priorities spending your tax dollars.

Chris Greenlaw: Mr. Chairman, in the interim, we have Norine with us so I heard what you are requesting, so what we've done is we've gone ahead and Norine is going to be putting verbatim minutes together for us so that you will have a complete copy of the testimony for these meetings as it pertains to the application.

Chairman Block: Again, may I have a motion to continue the public hearing?

Commissioner Igielski moved to continue the hearing to December 4, 2012. Commissioner Shapiro seconded the motion. The vote was unanimously in favor of the motion, with seven voting YES.

**IV. ADJOURNMENT**

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Commissioner Igielski moved to adjourn the meeting. The motion was seconded by Commissioner Sadik. The meeting was adjourned at 10:40 p.m.

Respectfully submitted,

Norine Addis,  
Temporary Recording Secretary